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ANTECEDENTS OF COMPLIANCE IN EMPLOYEE ASSISTANCE  
PROGRAMS: TELEPHONE VS. FACE-TO-FACE COMMUNICATIONS

by

Linda J. Brown

M.A. University of Detroit, 1977

A Dissertation  
Submitted to the Faculty of Graduate Studies  
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# ABSTRACT

Human service delivery systems provide recommendations and treatment for a wide gamut of personal problems. Employee Assistance Programs (EAP), sponsored by employers to assist their employees with a variety of personal problems, are among the most rapidly growing of such systems. One integral component of program effectiveness is compliance, that is, whether the recommended actions are accepted and implemented. Little research has been done on compliance within formal support systems, that is, within work settings in business and industrial organizations. EAP counselors kept records on 456 employees regarding their progress in different stages of the helping process. The employees were from 29 national organizations throughout the U.S. Data were collected on employee characteristics, problem type, the media used in different stages by the program administrators, and treatment recommendations. Two measures of referral compliance were obtained: overall compliance and first appointment compliance. The EAP counselors, themselves, were rated in terms of genuineness, trust, expertise and empathy. A higher rate of compliance in keeping first appointments was found for males than for females; the more severe the problem; for divorced than for married; and the greater the openness of the client. A higher rate of overall compliance was found the higher the job level; and the greater the complexity of the solution to the problem. Accessibility to the EAP office was negatively associated with compliance. No significant differences in compliance were found by problem type; counselor characteristics; or income. An unexpected finding was that the rate of

compliance did not differ for self-referred as compared to management-referred clients. Compliance was not found to differ with media usage, but subgroup analysis by media significantly increased the level of prediction. A higher level of prediction was obtained for the clients involved in face-to-face contact than for telephone counseling in the initial stages of assessment. Somewhat surprisingly, no difference was found in the openness or revealing of sensitive information between telephone and face-to-face counseling. Differences in media usage were found by geographic region. Face-to-face contact was used the most often in the northeast, whereas the telephone was used most often in the southwest. The more face-to-face contact was used in the initial assessment stage, the greater the rated trust and expertise of the EAP counselor. Action recommendations are provided regarding the conditions under which EAP client communications should focus on telephonic or face-to-face encounters.

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## CHAPTER 1.

### INTRODUCTION

Human service delivery systems provide recommendations and treatment to people in need of help. One component of program effectiveness is compliance, that is, whether the recommended actions are accepted and implemented. Much research has been performed on compliance as it concerns medical and psychological programs. Less has been done with regard to recommendations made within the "world of work". Employee Assistance Programs (EAPs) are becoming increasingly popular. The proposed study is concerned with the antecedents of compliance within this formal support system.

In a review of the literature, I will provide a brief description of EAPs. Evaluation research in this area will be discussed with regard to the assessment of compliance. The advantages and disadvantages of telephone and face-to-face communications will be elucidated, as well as problems in evaluating media differences. Such issues are of interest because of their possible ramifications for attaining various levels of compliance. Next, I will look at compliance itself, including the definition of the term, research concerning the degree of compliance, and variations in level of compliance as a function of differing client

and structural characteristics. I also will present a summary and critique of the literature.

History of EAPs. Googins (1984) examined the history of employee assistance programs (EAPs) as part of a larger history of industrialism and social movements. In an article describing the ecological perspective underlying EAPs, Googins observed that EAPs developed from the growing realization that work organizations cannot afford to ignore the impact of problems such as divorce and alcohol. Although such problems occur in individuals, their consequences are brought to the workplace, and thus, affect it.

Googins argues that it is simplistic to continue to see employees as separate from their roles as husbands, alcoholics, or single parents while at the workplace. To do so is merely to deny the reality and dynamic nature of today's world.

EAPs began in the U.S. as Occupational Alcoholism Programs with their sole attention usually being given to the problem of alcohol. Over time, they usually have expanded to include other drugs and ultimately any "personal problem" impacting job performance. Eventually, EAPs thus have provided legitimization for intervention into other problem areas such as drugs, mental health, marriage, legal and financial issues.

Bierman (1982), in a study of 10 Wisconsin EAPs, reported on these changes in the focus of the programs. She found there was a reduced length of service for employees referred (they were being

referred earlier), an increase in self referrals, and a reduction in the number of alcohol problems identified. In a recent article, Ewing (1982), making yet another distinction, reports that one half of employee problems in one firm's contractual EAPs were personal problems, while about 50% were work-related problems. Not all programs have made this transition, however; some still emphasize only alcohol and drug abuse issues. Hence, Ford and McLaughlin (1981) found that 100% of the respondents to their EAP survey offered alcohol rehabilitation programs or drug abuse programs, but there was not similar unanimity regarding other services.

EAPs are becoming increasingly pervasive in the U.S. and Canada. Roman (1981) conducted a survey of executives as part of the executive caravan study of Fortune 500 companies and reported that 50% of the 1976 respondents and 57% of the 1979 respondents indicated that their companies have EAPs. Land (1981) similarly found that there are over 4,000 employee assistance programs in the U.S.; that over half of the largest 500 industries have EAPs, and that over 5,500 American industries have EAPs. Evidently, American industries are responding positively to their employees' problems and the effects that these problems have on industry.

EAPs also have a recent history of growth in Canada. Initially, the term used was Occupational Programming, though both EAP and Occupational terms currently are being used. Numerous EAPs have been established in Ontario. Shain and Groeneveld in 1976

reported that the Addiction Research Foundation alone had engaged in occupational program development with 348 organizations employing eight percent of Ontario's total work force. As an indication of the potential for future growth of such programs, Bennett (1978) has estimated that approximately five percent of any given work population has alcohol-related work problems. This would represent a potential target population of 200,000 people in the Ontario work force and 500,000 across Canada for this problem alone.

EAP Models. Historically, an "internal" model of employee assistance programs was the dominant form of organization for employer sponsored programs. In this model a company hires an EAP administrator (also frequently labelled the EAP director, counselor, or coordinator) or a group of such staff to undertake the task of developing and administering its own internal program. The individual responsible for the EAP, who is a corporate employee of the plan sponsor, is provided with an office (which usually is on the company premises) and generally is available for face-to-face encounters with troubled employees when called upon for help, although the telephone may also be used.

Another EAP organizational model now emerging is called the "external program". Under this model, provision of the EAP service is contracted to outside consultants who are responsible for operating the program and coordinating its activities with the company and, when applicable, the union. Retention of outside EAP

staff provides a means for the employer to ensure insulation of the program from internal corporate pressures, may provide a greater level of expertise, and often delivers an effective program for smaller employers at scattered work locations. Frequently the offices of these consultants are not on the company premises and they, therefore, are not always as readily available for face-to-face meetings with employees as are internal program administrators. Telephone contact thus is more frequently utilized by outside program administrators to deal with troubled employees.

Many new internal and external EAPs are being established on this "regional" model as companies see the benefits of providing such programs for employees at sites which are incapable of supporting EAPs on their own. Even as these new models are expanding, though, some of the presuppositions and assumptions on which the original model was based apparently continue to influence all three EAP formats. Among these holdovers from the internal EAP model is the view that utilization of the telephone as a means of assessment, referral and follow-up of troubled employees may be less effective than the face-to-face contact which usually was the norm in the original model.

Stages in EAP Activities. Though EAPs vary considerably, some common elements can be isolated. Generally, the core service delivery components include the following, according to Erfurt and Foote (1977): (1) identification of employees needing assistance,



and referral of these employees to the program; (2) intake into the program and evaluation of the employee's problem; (3) further counseling of the employee (client) or referral of the client to an appropriate treatment agency; (4) following up with program clients and treatment agencies; and (5) helping clients return to work and monitoring their performance after their re-entry into the workplace.

Essentially, an EAP is the critical system in the occupational program, in that it provides the link between the work setting and the community treatment resources. The actual improvement of the client involves many phases and stages, such as the completion of the recommended treatment (e.g., long-term psychiatric therapy). EAPs, however, largely are concerned with the initial phases of treatment, that is, getting the client to the treatment person--the initiation of assessment and referral. Evaluation of this phase of the program essentially is a matter of determining the level of compliance attained. This is a major sub-goal of EAPs. Little, if any, published data exists on EAP compliance as defined in this study: Most of the available information is concerned only with treatment compliance. (Foote & Erfurt, 1984).

Compliance at the intake stage is defined as the troubled employee's following through with recommendations made to consult with professional resources (psychologists, psychiatrists, marital counselors, legal counsel, financial counselors, addiction counselors, etc.) for help with specific problems. Investigations

in the area of compliance are centered almost totally in the field of health care; the wider gamut of personal problems routinely dealt with by EAPs has not been investigated.

#### EAP Research

In spite of the rapid growth of EAPs in the last decade, some program evaluators are concerned about the lack of a sound research base for such programs. Bennett (1978) feels that the EAP philosophy ultimately is based on faith. Occupational program people believe that EAPs work, despite the relative lack of scientific evidence to substantiate this. Erfurt and Foote (1977) report that the reasons for the apparent success of EAPs are not well established. There is a need for systematic research to identify which EAP activities result in which specific outcomes. Roman (1984) has observed that the data bases are flimsy "... for such central issues as the superiority of the employee assistance model, the viability of self-referral, the cost-effectiveness of programs, or the need for extensive use of external treatment associated with an EAP" (p. 7). Shain (1978) reviewed the large bibliography on EAPs and found that it largely is descriptive with very little hard evaluative data. Weiss (1984), in a review of EAP evaluation research, observed that most of the investigations have relied heavily on some rather simple statistics, such as percentages and cross tabulations.

Shain also has noted that there is very little conceptual agreement about EAPs. Essentially, there is no clear definition of what an effective EAP program is or should be. This ambiguity at the policy level makes it difficult to conduct effective research. Roman (1984) has observed that persons working in this area have little in common in terms of theoretical guidance or methodological design. This reduces the likelihood of an observed cumulative impact of data or refinement of particular methods or measures. Moreover, for many practitioners, involvement in research has blurred the boundaries of what constitutes research results, single evaluations, or the public relations activities of corporate or government interests.

Shain (1978) expresses some concern over the lack of systematic, methodological assessment of different approaches to evaluation research. Two of the many problems include problems of comparability and problems of conceptualization. Comparison across different problems is complicated by the different methods of reporting and descriptions of the identified groups in terms of demographic characteristics. Moreover, such EAPs are studies in a theoretical vacuum. Research programs need to treat intervention systems of EAPs as systems located in another system, such as the organizational system of the workplace.

A major reason for conducting evaluation research is that the results of such studies can be used for improving the program

(Wholey, 1981). In a recent paper, Iutovich and Calderone (1984) have called attention to the relationship between the evaluation of a treatment process and strategies for successful programming. These authors have noted that evaluative data have been given relatively low priority for many EAPs with regard to program planning. Programmatic changes should be made on the basis of accurate data, rather than mere trial and error. Iutovich and Calderone have specified some of the basic kinds of data which are useful for planning. These include outcome data, such as indicators of success, and background characteristics, such as the type of job or marital status.

The attention drawn to programmatic data is of relevance to this study. Under this category, Iutovich and Calderone include the type of referral, the presenting problem of the employee, the type of treatment received, and the degree of compliance with the program. These authors suggest that, if such data are collected, it will be possible to assess the success of the program overall, as well as the differential success rates for individual employees. It is important to know for whom the program works. Such data will make it possible to understand what is going on and what changes are necessary to improve the program.

### Organizational Context of EAP and Media

Bennett (1978) has observed that the environment in which EAPs develop is important. The forces at work in the workplace mold and modify the program in distinct ways. Each program must be tailored to take into consideration the peculiarities of its workplace if it is to operate at beyond the minimum level of effectiveness. Steel (1984) found that extra-organizational factors influence the nature of EAP program activities. Urban-based EAPs have more problems to confront for their clienteles. In urban areas, EAP staff spend more time building referral relationships with existing service providers. In more isolated and rural areas, staff persons focus instead on internal service programs. Telephone communication is particularly critical in external EAPs.

The increasing emphasis on external programs has opened up new challenges. In a study of alcohol and drug abuse, Sudduth (1984) found that external programs are less likely than internal programs to be used by long time established employees. In addition, more management support was found for internal than external programs. Insofar as an emphasis on external EAPs exists, efforts are necessary to improve the effectiveness of these external programs.

Steel (1984) reports that a serious communications problem exists with regard to specific information concerning the existence and procedures of EAPs. Limited information, then, is precluding maximum use of the services that can be provided. Dickman and

Emener (1982) found that the 10 attributes of an EAP program critical for success include confidentiality, anonymity and trust, as well as easy access. These conditions are essential for maximum employee program use and benefit and they, in particular, have communications implications. For instance, use of the telephone is one way to maintain confidentiality and to overcome problems of access.

#### The Telephone: Advantages

The telephone brings two or more people, often separated by long distances, together into direct and immediate communication, and eliminates much of the time which otherwise would have been spent in traveling. It does not replace writing or face-to-face meetings entirely, rather it supplements them and somewhat alters their character. As people become more accustomed to handling all kinds of transactions from banking, catalogue shopping and business contacts to crisis intervention therapy and patching up lover's quarrels by telephone, the mystique of the telephone as an impersonal form of communication may lessen (Aronson, 1971). As well, the telephone provides a dramatic contraction in the time needed to establish communication, transmit orders, and consummate business transactions (transaction time).

The advent of telephone counseling for the delivery of mental health services has been characterized as providing rapid access,

- on a 24-hour basis, "to a population that might not have such services available otherwise. It can be seen as a service which is immediately available to clients at the time of need. The concept of the telephone hotline combines the use of the telephone to obtain information with the concept of providing information without cost to callers from a wide geographic area, including areas that usually require long distance charges. It also permits serving callers during hours extending beyond the normal workday. There is increasing use and acceptance of telephones as a means for providing information and helping people through services such as drug-abuse hotlines, child abuse hotlines, as well as programs for battered spouses, career development, investment, V.D., AIDS, runaways, sales, and other services nationwide.

Temporal Aspects. In telephone interviewing, only audio cues are relevant; there are no visual distractions for the interviewer so that he/she can concentrate on the questions themselves. Janis (1982) suggests that a shorter time span is required to accomplish tasks by telephone, in that it removes chatter. Groves (1978) reflects that the telephone is not a more efficient use of interview time, but rather constitutes a reduction of time available to respondents to think about and to fully reveal feelings about the questions. In short, the speed of telephone interviews may yield more superficial responses to questions. Groves and Kahn (1979) note that there is a tendency for telephone respondents to truncate

answers to open-ended questions. This could result in a loss of useful information, since responses to open-ended questions often enrich the understanding of respondents' feelings and behavior. Truncated answers occurred among all demographic groups, but the truncation was stronger among respondents of higher income.

Vulnerability and Intimacy. Aronson (1971), in an article on the sociology of the telephone, notes that critics were shocked by the apparent absence of inhibitions when people spoke on the phone. One critic wrote of impulsive women who "say things to men and to each other over the telephone that they would never say face to face." An advertisement appearing in the National Telephone Directory (1897) notes, "Despatch and Privacy are among the important features of Long Distance Telephone Service. All subjects may be described without reserve" (p. 733). It also has been suggested that choices in media in regard to intimacy should be affected by the nature of the task to be carried out; if the task is relatively unpleasant, too much intimacy might be avoided. Williams (1975) suggests that with tasks of very high intimacy--perhaps very embarrassing, personal or conflictual ones--the least immediate medium (the phone) would lead to more favorable evaluations than several of the more immediate media (picture phone and face-to-face). Some studies have considered the issue of sensitive information which may be easier to gather over the phone (cf. Sudman & Bradburn, 1979). Christie (1972) asked a sample of businessmen to



list advantages of the telephone as compared to face-to-face conversation. The impersonality factor loaded highly on the ability to "conceal identity if required" and the view that it "allows for less stress in unpleasant tasks". In the Sinaiko (1963) experiment, subjects preferred to negotiate by telephone because of its "depersonalized" nature. Asked which tasks people would prefer to use the telephone for instead of face-to-face contact, respondents cite high conflict or embarrassing situations. LaPlante (1971) and Short (1972) both found support for embarrassing situations faring better by phone.

#### The Telephone: Disadvantages

Communication issues in telephone interviews include the following: (1) channel capacity is limited; (2) "social custom" suggests less intimacy via phone than in in-person dialogue; and (3) heightened uncertainty about affective meanings behind words, since conversational partners with facial expressions, gestures, etc., are not visible. The medium may cause some people to be more formal in their communication and this may result in the other person misattributing distance and formality and responding similarly.

Wilson and Williams (1977) compared telephone and face-to-face conversations from transcripts and found that the lack of nonverbal feedback on the telephone engendered uncertainty. The telephone conversations also were viewed as less pleasant than face-to-face.

If telephone intervention is to have an impact in helping the client resolve problems without further clinical intervention, health care providers need to focus on the identification of a clear statement of the client's problems in order to effect a solution. Further, perhaps it is most appropriate to make an appointment to see the client when he or she has difficulties in identifying a problem over the phone.

#### Advantages of Face-to-Face (Interviews)

Most researchers speak of face-to-face communication as the most advantageous medium for persuasion. Support for this assumption comes from those who emphasize the information processing features of communication and persuasion. One argument is that face-to-face yields more persuasive impact because it provides the communicator with the opportunity to utilize several channels of verbal and nonverbal information (Werner, 1978). The power of one's persuasive appeal may be attenuated (but it also may be easier to be deceitful) when bargaining by telephone than when one can see his opponent.

In assessing the relative merits of telephone and face-to-face communications for survey purposes, Groves and Kahn (1979) found a tendency for respondents to prefer the mode they had experienced but also a tendency to prefer the personal interview to the telephone. They also found more positive feelings in face-to-face interviews.

Demographic differences were found in regard to these positive feelings. It was found that, in the comparison of face-to-face versus telephone, a higher proportion of the solutions discussed in the face-to-face situation were concerned directly with the problem worker (Champness & Davies, 1971). Groves (1978) found a greater number of responses to open-ended questions through personal interviews than in telephone interviews, in addition to differences with respect to speed of administration. Westrum (1972) found that face-to-face contact was especially necessary in those communications situations which involved a high degree of emotional contact (such as conflict resolution, authority relations, and the development of trust). For the less intimate task (free discussion), the most immediate medium, face-to-face, leads to the most favorable evaluations, and the least immediate, the telephone, leads to the least favorable (Williams, 1975). Janofsky (1970) studied self-disclosure in interviews conducted face-to-face or through audio only, and found that there were nonsignificant tendencies toward higher self-disclosure when face-to-face.

#### Problems in Evaluating Media Differences

Cost and Efficiency. In assessing effects of medium on communication, it may be necessary to distinguish between process and outcome. While level of outcome may fail to find effects of the medium, effects may be found at the level of processes leading up to

a final solution. Direct costs favor telecommunications over travel, sometimes very strongly; energy-saving considerations also favor telecommunications alternatives. Instead of straight comparisons of media, the emphasis should be on the utilization of media and on how to maximize certain media for specific types of problems and types of people.

Goals. Media "effectiveness" may represent an oversimplification. With single purpose goals (information exchange) there is no problem, but typically there may be more than one goal and these goals may be incompatible. Private goals may be different, for example, getting to know one another, making a good showing in front of the boss, getting the issue settled quickly (Short et al., 1976).

Media and Nature of the Task. Every situation does not warrant face-to-face interactions. Christie and Holloway (1975) distinguish between person-oriented communication activities (e.g., bargaining, negotiation, assessing the other person) and non-person-oriented communication activities (e.g., transfer of information, simple problem solving). Tasks in which interpersonal relationships are important also are sensitive to the medium, while those involving simply cognitive material (e.g., problem solving, information exchange) are not. Media effects were not found at the level of task outcome, but only at the more subtle level of person-to-person interaction which precedes task completion.

In conflictual tasks it is possible that the exact relationship between participants is particularly important. In contrast with problem-solving situations, the extent to which participants like, trust, dominate and impress each other is likely to have an effect on task outcome (Williams, 1977). Since the audio medium is low in social presence, people talking on the phone are more task-oriented and less person-oriented. In tasks involving a high degree of confrontation and interpersonal tension, conversations over audio links (and persons encountered over audio links) are preferred (Short, 1972). Media cannot be compared apart from task variation (telephone and face-to-face communication cannot be compared independently of the task--one may be more suitable in one situation than in another).

Individual Differences. Berman, Shulman and Marwit (1976) found evidence that people differ in the extent to which they encode affect in the visual or the audio channel. No generalization could be made with regard to the differentiation of affect along the facial or vocal channels. Some people seem to show variation in feeling primarily through the face, others primarily through tone of voice. Some people are experienced and at ease with the telephone, others are not.

The relative importance of the different channels varies according to the particular people, situations and subject matter involved, and attempts to compare them other than in this way are of dubious value.

### Compliance

The process of helping people who need assistance of some type is fraught with many potential problems. The first problem, of course, is the ability of the person to reach and be reached initially through some medium. Another problem is the ability to get the person needing assistance to agree to and then proceed to establish contact with a helper at the next level of care and begin the process. Helping programs, such as Employee Assistance Programs, face such issues.

The previous section dealt with the communication channels of media through which people are reached. A major problem in establishing initial contact with the recommended resource is that often there is resistance to accepting help from the formal support system. This is the problem of compliance. There are various reasons for resistance to the help which would facilitate required change. In this section I will deal with a definition of compliance, limitations of the concept, and degree of compliance. Then I will look at antecedents of noncompliance, including client characteristics and structural features.

#### Definition of Compliance

Neutral terms in the definition of compliance include adherence to treatment, patient concordance (shared responsibilities) and acceptance of recommendations (Masur, 1981).

Noncompliance generally is defined as nonadherence of clients to expert advice and/or to keeping appointments.

Limitations of Concept. The term "compliance" itself may be unfortunate in that it both reflects and perpetuates ill-conceived notions of the health care provider's role. The term evokes images of a passive, subservient and unfeeling patient. On the other hand, it creates the expectation that the practitioner is omniscient and omnipotent. Compliance implies more authoritarian interaction, whereas adherence suggests more of an egalitarian interactive system (Masur, 1981). Sackett (1976) notes that we cannot assume that faithful compliance guarantees achievement of the treatment goals, be they curative or preventive. Lack of compliance does not necessarily suggest a lack of definitive action. Ley (1982) suggests that the identification of a specific problem for the caller to work on also may be helpful in allowing the client to engage in problem solving behavior independent of the mental health system.

#### Degree of Noncompliance

Marston (1970), in an early survey of 33 carefully done studies covering a variety of medical problems, found a median of 43% of patients who failed to comply, with a range from four percent to 92%. Stone (1979) notes that, while the precise level of compliance is difficult to determine and varies markedly from one

situation to another, an estimated one-third to one-half of all patients fail to follow fully the treatments prescribed for them.

Studies of patients who apply for out-patient psychotherapy but break off clinic contact before the first treatment session, have discovered that between 21% and 46% of them end up in treatment elsewhere within the next year (Baekeland & Lundwall, 1975). Ley (1977) reported mean percentages of noncompliance as 49% for diets and 51% for other forms of advice (given by a medical practitioner). One study of the effect of home visits on reducing the no-show rate for new referrals to an adolescent psychiatric clinic found 60% compliance (Hildebrandt & Davis, 1975). Other appointment-keeping compliance studies have had to do with recommended dental care, HMOs and peptic ulcers; the range of compliance is from 55% to 84%.

Stone (1979) has noted that the failure of patients to follow recommendations made to them by health experts usually represents a hazard to the patient's health, a waste of health resources, and a source of frustration for the health expert. Many studies of such failures lead to the conclusion that every patient should be considered as potentially "noncompliant". The most promising site for intervention is in the patient-expert interaction. Viewing compliance as the property of the transaction between expert and client, it is appropriate to see the responsibility for establishing compliance as shared between expert and client.



Experts themselves are acutely concerned about the failure of their clients to utilize their advice. They feel frustrated by their inability to motivate people to do what would be "in their best interest". Some experts take upon themselves responsibility to see that clients do as they advise (Komaroff, 1976; Schmidt, 1977). Others believe that experts cannot succeed with such efforts (Burnum, 1974), or believe such efforts to be inappropriate (Schuller, 1977). Social interaction always involves issues of responsibility and these issues often crystallize in the relationship between experts and their clients.

#### Client Characteristics and Noncompliance

##### Demographic

Raynes and Warren (1971) found that the demographic factors associated with appointment-keeping were: male vs. female; black vs. white; over-40 vs. under-40; self-referrals vs. the non-self-referred. Demographics suggest greater compliance with increased age, education and socioeconomic status, as well as a racial correlation (Stone, 1979). From a configural perspective, the individual who is most likely to elope from the hospital or to sign out against medical advice is the younger male patient who has either previously eloped or signed out against medical advice or who has had many previous hospitalizations. He is apt to deny his

illness, to be resentful and distrustful and to have sociopathic features (Altman, Brown & Sletton, 1972). Baekeland and Lundwall (1975) have reviewed studies on noncompliance involving age, sex and socioeconomic status. In 16 out of 51 studies in which age was taken into account, it proved to be an important clue in the persistence of treatment. It seems that the younger patient is more likely to drop out of treatment. Out of 29 investigations, 13 reported that the sex of the patient helped to determine whether he or she would stay in treatment--female patients are more likely to drop out of out-patient treatment. In 35 out of 57 investigations, the socioeconomic status of patients, whether determined by education, income or occupational status, was an important guide as to whether they would drop out of treatment. This may be understandable in light of the fact that therapists usually are middle-class people whose values and life goals for a patient may differ from those of the patient himself. The importance of socioeconomic status is highlighted by the experience of a clinic which catered to patients with an unusually high educational level (they included many medical and graduate students) and which rejected 50% of its applicants. Only six percent of those accepted failed to come for at least six visits (Lief, Lief, Warren & Heath, 1961).

/ In a review of the literature on noncompliance, Ley (1979) summarized findings regarding individual and social characteristics

of the patients. Variables that relate to noncompliance include duration and complexity of regimen, patients' levels of dissatisfaction, lack of supportive follow-up, patients' perception of their vulnerability to the consequences of the illness, the seriousness of the illness, the effectiveness of treatment, and problems caused by the treatment. Not related to noncompliance were sociodemographic factors, personality and doctor characteristics and illness variables, including duration and severity of the illness. Stone (1979) found that both the nature of the illness and the characteristics of the treatment regimen influence compliance. Appointment keeping is a major issue in compliance. Berrigan and Garfield (1981) found that lower social class was related to broken appointments and self-termination of treatment. Similarly, Weighill et al. (1983) found that social class was related to compliance. Meyer and Mendelson (1960) found that 78% of patients not showing for the first psychiatric clinic appointment were of lower socio-economic status.

Race has been found to be related to keeping appointments for psychiatric clinics. Wilder et al. (1977) found that black patients had a low probability of complying with recommendations for outpatient psychiatric follow-up. Weddington (1983) also found that race was associated with patients keeping appointments, although social class may have been an indirect factor. The cultural factor comparisons which consider the effects of social class and race

indirectly examine access. One prominent characteristic of the person's class and race is the differing availability of helping resources (Lieberman & Mullan, 1978).

#### Motivational Aspects

Many studies have found that poor motivation has been implicated in defection from treatment. Motivation sometimes is inferred from the basis of the source of referral, that is, institution vs. self. Intention to comply is an issue. Davis (1968) found that only 55% of interviewed patients even stated that they had any intention of complying with their physicians' directions. Moreover, the saliency of a potentially stressful event in the person's life--the degree to which he or she was troubled by it--has a powerful effect on compliance (Lieberman & Mullan, 1978). Low levels of anxiety or depression also may predispose patients to abandon treatment once symptoms have been abated.

#### Cognitive Aspects

Hoehn-Saric et al. (1964) found that providing patients who are referred to psychiatric services with information as to what to expect and how to gain the most from therapy improves both their attendance and their cooperation at therapy sessions. Moreover, following Erickson's principle of accepting and using what the patient offers, people are most likely to accept those new ideas or

prescriptions for new behavior that begin in and represent extensions and variations of their own views (Ansburn, 1981).

Persons who call for assistance may be expecting the health care provider to respond or act in a certain way and their ideas are grounded in these persons' own experiences and cultures. It is, therefore, inevitable that expectations sometimes are not met by the doctor (Stimson, 1974).

Becker and Maiman (1975), reviewing relevant literature on the Health Belief Model, conclude: (1) most studies show "perceived susceptibility" is related to compliance; (2) no association exists between a doctor's view of the seriousness of the patient's illness and the patient's compliance; (3) there is little evidence of a relationship between lay perception of the seriousness of an illness and compliance in preventive health action; (4) patients' own perceptions of the seriousness of their illnesses are related to compliance with prescribed therapies; (5) patients' estimates of the efficacy of the advocated health behaviors are related to compliance; and (6) the patients' estimates of benefits are related to compliance. Christenson (1978) suggests a Modified Compliance Behavioral Model: The individual brings to the encounter certain attitudes, beliefs and assumptions about his ailment (or problem in general), along with estimates of the likelihood that he will be able to get any help for it (effect a cure); these attitudes and beliefs are based on past experience, level of education, etc.

Studies reviewed by Haynes et al. (1979), however, indicate that patients' attitudes toward health care professionals in general and the system as a whole do not appear to be correlated with compliance.

### Structural-Contextual

Informal Support Networks. Competing for compliance is a further problem. A spouse or another source may be leaning toward another course of action and the individual's compliance with one may, of necessity, mean noncompliance with the other. Therefore, the subject may be complying with the wishes of a peer or an experimenter. Stimson (1974) suggests that the patients have ideas and attitudes about the recommended course of action; they are not being absorbed in a thoughtless vacuum. People may consult a whole range of other people (such as family, friends, neighbors or self-help groups) for advice and for suggestions regarding the use of medication, counseling, etc.

Lay consultation with family and the friendship network may impact the decision to comply. Freidson (1960) notes that a person passes through the referral structure not only on his way to the physician but also on his way back, discussing the doctor's behavior, diagnosis and prescription with his fellows, with the possible consequence that he may never go back.

Temporal. The waiting period is important. The percentage of patients who do not attend increases with the length of the waiting

period (Raynes & Warren, 1971). This study found significant differences in percentages of nonattenders after a five day waiting period: at 0-5 days it was 13%; at 6-10 days it was 50%.

Finnerty et al. (1973) found that, among hypertensives, a 50% attendance rate for referral appointments after a one to two week wait could be increased to 95% attendance by reducing the waiting time to one to two days. Alpert (1964) found that patients who failed to keep appointments were twice as likely to be without health insurance as those who kept their appointments. Raynes and Warren (1971) concluded from their data that a patient who has any of the following characteristics is least likely to attend: male/black/40 years of age or less. It becomes evident that identification of a specific problem together with the responsiveness of the caller to the referral question consistently predicts shows and no-shows for scheduled appointments (Walfish et al., 1975). It cannot be concluded, however; that showing up for an agreed-upon appointment is necessarily a sign of successful telephone intervention or conversely that not appearing is a sign of failure.

The process of referral itself can be related to attendance at referral appointments. The most important and best documented finding is that the longer the elapsed time between referral and the actual referral appointment, the lower the likelihood that the patient will keep it (Haynes et al., 1979).

Accessibility. In terms of social structure, many factors affect our overall communications picture. People working on an hourly basis generally cannot withstand whole days waiting in line in order to be attended to. Transportation problems might affect the appearance rate for clinics located at different parts of a city or for those which are far removed from the existing urban transportation system. Again, poor educational backgrounds might affect the patients' acceptance of certain technological instrumentation (Quesada, 1976).

Individual vs. Clinic Help. Hoenig and Ragg (1966) found that patients referred to a psychiatric out-patient department were more likely to attend if referred to a specific physician rather than just to the clinic.

Costs. Psychological, physical, and financial costs are negatively correlated with compliance (Becker and Maiman, 1975). Masur (1981) found that patients are much less likely to comply if the costs are perceived as great; the amount of behavioral changes required (apart from financial cost) of a treatment protocol can be considered potential "costs".

Type of Referral (Who Initiates Referrals). The non-attendance rate of self-referred patients was much lower than that of patients from any other source (Raynes & Warren, 1971). Sackett and Snow (1979) studied appointment-keeping in several different clinical settings. When appointments are initiated by



health professionals, compliance with appointments is only about 50%. On the other hand, when the appointment is initiated by the patient, compliance rises to roughly 75%. The patient who drops out is less likely to have been self-referred (Straker et al., 1967).

Generally, empirical studies have found that whether a person volunteers or not makes little difference in staying with the treatment. Non-voluntary referrals show about the same degree of favorable outcomes as voluntary, and only in some cases have the voluntary referrals improved at a slightly greater level (Heyman, 1976). Iutovich and Calderone (1984) suggest in their analysis that employees referred by supervisors fare slightly worse in their treatment outcome than employees referred through other sources.

### Summary and Critique of Literature

#### Compliance

Outcome Focus. Most of the research on compliance emphasizes the degree of compliance and gives very little attention to the process aspects of compliance. We suspect that many of the negative findings of research on compliance represent a failure to examine important underlying factors. There has been considerable attention to demographic variables. Less research has been done on stages in

the helping process.

Program Stages. A limitation of prior research is the emphasis on outcome. Accordingly, it may be useful to look at helping in terms of the helping process with its different stages that occur between the initial contact and the outcome phase, that is, compliance. The possible relationship between these phases and compliance has received little attention.

Scope of Problem. Most of the research has dealt with a single problem rather than with multiple problems, e.g., one study deals with a medical issue, and another with a psychological issue. The failure to utilize a multi-problem approach makes it difficult to evaluate the impact of the separate problems on compliance. It is difficult to make generalizations across problem types from the literature because there is so much variation in the methods used. There is a lack of comparability of studies with different types of problems. There is a need for more comprehensive studies that look at a variety of different problems using the same methodology. Related to this issue of type of problem is the question of severity of the problem. Most of the psychological research is on crisis situations that are life-threatening. Only limited research has been done on problems of lesser severity, so little is known about the degree of compliance as a function of problem severity.

Methodological issues. Sackett's (1976) review of many different types of studies stresses the great variation in

compliance rates depending upon the type of behavior studied and the circumstances under which care is offered. Many of the compliance studies raise questions about methodological rigor because of issues such as self-reports and self-selection. Self-reports are not always reliable and have a limited value since subjects tend to overestimate compliance. Self-admitted noncompliers, however, are likely to be truthful.

Organizational Pressures For Compliance. Most of the research has dealt with an individual level of analysis. There is an implication that compliance largely is an individual decision-making process. The role of the social context on compliance is little understood. In particular, the role of social pressures from the marketplace has not been examined. For instance, an assumption of Employee Assistance Programs is that compliance is more effective when the worker faces possible loss of a job. Little is known about the validity of this assumption, particularly with regard to client characteristics, such as job status.

With more and more helping being taken over by formal support systems, it seems essential that compliance be investigated from a higher level of analysis. Support systems, such as health delivery systems, then, within this framework, should consider communication strategies likely to increase the implementation of decisions made regarding recommended treatment and referrals.

The problem of noncompliance with regard to human services

delivery systems is much more complex than the simple interaction of a patient with his or her doctor. Much of the literature, particularly in the medical area, deals with doctor-patient communications and compliance. Research findings here have limited relevance to human services delivery systems. The interface between health delivery systems and the formal work organization is one consideration. The help seeking process involves the individual in a fairly complex set of relationships within a setting that includes the professional support person, the referral subsystem, and the organizational sponsor of the program, as well as other informal support systems. Thus, relating noncompliance to a specific source or simply listing the potential number of problem sources is not enough. Noncompliance is likely to reflect a multiple set of antecedent conditions.

#### Statement of the Problem

The present study examined some of the structural and process features of an employee assistance program with regard to referral compliance. The focus of the study was on the correlates of telephone and face-to-face communications.

The first objective was to obtain descriptive statistics

regarding the helping process: overall statistics on the total sample, and on the inter-relationships among the structural and process variables. The second objective was to examine the relationship between media usage and stages in the helping process. The third objective was to examine the antecedents of compliance.

## Chapter II

### METHOD

#### Subjects

The total sample consisted of 456 subjects. These subjects are employees of national organizations that have contractual arrangements with a private consulting firm to develop, administer and manage their employee assistance programs. This consulting firm is Human Resources Group, Inc., with headquarters in New York, and offices in San Francisco, Los Angeles, Portland, Baton Rouge, Houston, Dallas, El Paso, Connecticut and Chicago. The professional staff generally have Masters degrees in social work or counseling, or Ph.D.s in clinical psychology or counseling.

Description of Sample. The total sample consists of 51% male and 49% female. The average age was 37.5 years. The average length of service was 4.5 years. Most of the employees (60.5%) were married; 19% were single; 7.8% were separated; 10.1% were divorced. See Appendix H for further information.

Twenty-nine companies located across the United States were involved in this study. There were a total of 20 program administrators located in four geographic areas: Northeast, Southwest, West and Midwest. The present experimenter is an administrator of the Chicago midwest office.

### Procedure

Shortly after the approval of the proposal, program administrators employed by Human Resources Group, Inc. were directed to maintain extensive records concerning the employees contacted by the EAP. (See letter to EAP administrators in Appendix D). The program administrators continued to fill out one form that ordinarily is completed, that is, the EAP caseload report in Appendix A. In addition a new questionnaire was developed that was filled out by the EAP administrators to obtain more specific information regarding media differences and compliance (See Appendix B ). A "Glossary of Terms" which was provided the administrators is in Appendix C. The questionnaires were completed by the EAP administrators in the time period from February 3, 1985 to April 15, 1985. A high rate of return was obtained -- 91%. This probably is partially due to the letter from the president of the firm requesting each EAP administrator to cooperate with the researcher.

The items included in the questionnaire were derived from a variety of sources. The review of literature, of course, suggested many of the items. The present experimenter's experience as a program administrator was an important source. Discussions also were held with various officials and staff within the organization as well as other EAP experts. Many EAP administrators were involved specifically in the development of the scales measuring compliance. One pilot study involved asking them to rate the items used in the

compliance: first appointment scale. An intensity score was assigned to the items on the basis of this pilot study. Moreover, the questionnaire was pretested to establish any problems regarding definition of terms.



## List of Variables

### Independent Variables

#### Client Characteristics

Demographic. Sex, age, job level, income, marital status, length of service, prior EAP contact.

Psychological. Willingness to reveal self (openness), willingness to reveal demographic data (openness-demographic).

#### Problem Characteristics

Type of Problem. Psychological, legal, financial, addiction, social welfare, marital, job related. (See Appendix G for a list of specific problems categorized under each label).

Dimensions of Problem. Single vs. multiple; complexity of solution; severity of problem.

Effects of Problem on Job. Overall job performance, attendance, work quality, work quantity, relationships, job attitude.

#### Accessibility

Accessibility of client to EAP office.

Office hours convenient.

Availability of transportation; public or private.

Regular on-site visits conducted.

### Stages In Helping Process

Initial Contact. Medium used in initial contact: telephone vs. face-to-face.

#### Time Spent In Initial Contact

Source of Referral. Voluntary; nonvoluntary - suggested, urged, firm.

Referral Initiation. Client asked for appointment; Client suggested referral after discussion; Administrator suggested referral after discussion and client responded affirmatively; Administrator raised referral and client deferred, waffled or refused; No referral necessary.

Assessment Stage. Information exchange, clinical assessment, short-term counseling.

Type of Recommendation. Counseling by EAP; self-help group; outpatient-clinic; outpatient-private; inpatient treatment; legal-clinic; legal-private; financial, other.

Waiting Time. Between initial contact with EAP administrator and first scheduled appointment with resource.

Follow-Up Stage. Time spent in minutes on telephone or face-to-face; number of telephone and face-to-face follow-ups.

### Dependent Variables

Compliance: First Appointment. Missed first appointment;

cancelled first appointment and did not reschedule; contacted referral source for information but made no appointment; action postponed; cancelled first appointment and rescheduled; kept first appointment with referral source. (This was scored as an intensity scale from one to six).

Compliance: Overall. The EAP administrators were asked to use whatever information they had available to make an overall judgment regarding compliance. The scale ranged from "did not comply"; "partially complied with recommendations"; to "fully complied with recommendations".

## CHAPTER III

### RESULTS

The first objective of the study was to obtain descriptive statistics regarding the helping process for the EAP under study. Two kinds of descriptive statistics were obtained: overall statistics for the total sample, and statistics on the interrelationships among the structural and process variables. Within structural variables, were included the demographic variables and the problem characteristics variables. These are "givens" and not subject to manipulation. Within process variables, were included variables involved in different stages or phases of the helping process from initial contact to treatment recommendations.

The second objective was to examine the relationship between the media usage and stages in the helping process. The media include telephone and face-to-face. The stages were from initial contact to follow-up.

The third objective was to examine the antecedents of compliance: These include the structural variables and the process variables.

The method of presenting data in this chapter is largely by the class of variables used which underlies the conceptual scheme rather than by the specific statistical technique used. Accordingly, results are "pulled together" from different tables and

analyses. The various multivariate analyses used serve mainly to simplify the many comparisons in the most expeditious manner.

#### Interrelations of Structural and Process Variables

A number of statistical techniques were used to analyze the data. These include discriminant function analyses, canonical correlation analyses, and multiple regression analyses. More simple descriptive statistics, such as means and standard deviations, frequencies and percents also were used. The discriminant analyses tables are not presented in this chapter but are located instead in the Appendix. The focus is on the means and standard deviation tables generated by the discriminant analysis.

Discriminant analysis is used for assessing relationships among variables when one set of variables is categorical, or divisible into groups. It tests the hypothesis that group means are equal for a number of variables. The analysis provides the best linear combination of independent variables which will discriminate among the previously defined groups. It provides weights indicating the relative value of the independent variable in the equation. For this study, a stepwise derivation of the functions was used.

Correlations of the independent variables with the derived function were obtained and are more appropriate for interpreting the actual relationships among the variables than are the discriminant weights. The discriminant analyses technique provides the mean

scores for each of the values or levels making up a variable. An F test assesses whether there are significant mean differences. In this paper, inspection of the means making up a "set" is used to identify the specific means contributing to the significant overall F.

Several tests were conducted for determining the relative value of the function in discriminating the groups and the relevant statistics are reported in the appendix. One of these is the percent of total variance in the discriminating variables explained by the function. Another is the canonical correlation (R) which is the correlation between the function and the group variable. As well, a Chi-square test of significance indicates the discriminating power remaining in the variables as each function is removed. Finally, the ability of the function to classify subjects into groups is indicated by a percentage measure of correct classification. Discriminant analyses were performed on the following sets of categorical variables: job level, media usage, referral source, problem type, and type of EAP recommendation.

#### Problem Characteristics

The kinds of problems which underlie the use of employee assistance programs is one aspect of the first objective. Problem types were examined to assess relative frequencies and correlates. Table 1 presents the frequency and percent of clients by problem

Table 1

Frequency and Percent by Problem Type

---

	<u>n</u>	Percent
Psychological	135	30.3
Legal	61	13.7
Financial	38	8.5
Addiction	98	22.0
Social welfare	35	7.9
Anti-social	8	1.8
Marital	39	8.8
Job related	<u>31</u>	<u>7.0</u>
Total	445	100

---

Table 2

Frequency and Percent by Nature of Problem

	<u>n</u>	Percent
Single problem	269	59.9
Multiple problems	<u>180</u>	<u>40.1</u>
Total	449	100



type. It may be observed in this table that the most common problem is psychological (30%), followed by addiction (22%). Table 2 presents frequency and percent by nature of the problem, that is, single vs. multiple problems. Table 3 presents data by nature of solution, that is, simple, complex and no viable solutions. Table 4 presents data by problem severity.

Table 5 presents means and standard deviations by problem type. It may be observed that problem type has an impact on various aspects of the referral process, in particular for addiction and psychological problems. The EAP administrators generally described each of these two problem types less often as single problems and more often as multiple-type problems. Addiction and psychological problems also were rated as being more severe than other types of problems ( $F = 9.83$ ,  $df = 245$ ,  $p < .001$ ), as well as requiring more complex solutions ( $F = 4.37$ ,  $df = 245$ ,  $p < .001$ ).

Addiction and psychological problems were found to have a stronger association with job performance than other problems. Job performance was affected adversely by these two problems ( $F = 4.74$ ,  $df = 245$ ,  $p < .001$ ). More specifically, attendance problems ( $F = 2.48$ ,  $df = 245$ ,  $p < .05$ ) and a reduction in work quality ( $F = 2.79$ ,  $df = 245$ ,  $p < .01$ ) were associated with difficulties in addiction or psychological domains. Legal and financial problems had the lesser effect on overall job performance and attendance. Problem type also was a factor in follow-up. More time was spent in the follow-ups

Table 3

Frequency and Percent by Nature of Solution


---

	<u>n</u>	Percent
Simple solution	200	44.3
Complex solution	247	54.8
No viable solution	<u>4</u>	<u>0.9</u>
Total	451	100

---

Table 4

Frequency and Percent by Problem Severity


---

	<u>n</u>	Percent
Less severe	125	27.8
Moderately	216	48.0
Severe	<u>109</u>	<u>24.2</u>
Total	450	100

---

Table 5

Means and Standard Deviations by Problem Type on Selected Variables

Problem type	Variable											
	SEX			AFJOBPER			WAYATTEN*			WAYQUALI*		
	n	M	SD	M	SD	M	M	SD	M	M	SD	WAYQUANT*
Psychological	79	1.59	.52	2.57	1.06	1.78	.41	.41	1.61	.49	1.61	.49
Legal	36	1.58	.50	2.14	1.05	1.83	.38	.38	1.81	.40	1.75	.44
Financial	20	1.30	.47	1.75	1.07	1.95	.22	.22	1.80	.41	1.95	.22
Addiction	57	1.33	.66	2.85	1.26	1.61	.49	.49	1.53	.50	1.49	.50
Social welfare	15	1.67	.49	2.07	.96	1.93	.26	.26	1.73	.46	2.00	.0
Anti-social	6	1.67	.52	2.83	.98	1.83	.41	.41	1.33	.52	1.67	.52
Marital	25	1.32	.48	2.60	1.08	1.84	.37	.37	1.52	.51	1.68	.48
Job-related	8	1.63	.52	3.75	.71	1.63	.52	.52	1.25	.46	1.50	.53

Table continues

Table 5 continued

Problem type	n	Variable									
		WAYRELAT*		NATUPROB		NATUSOLU		PROBSEVE		INFOEX*	
		M	SD	M	SD	M	SD	M	SD	M	SD
Psychological	79	1.73	.44	1.54	.55	1.68	.47	2.05	.62	1.25	.44
Legal	36	1.89	.32	1.33	.48	1.39	.49	1.72	.74	1.06	.23
Financial	20	1.95	.22	1.20	.41	1.35	.49	1.25	.55	1.00	.0
Addiction	57	1.63	.49	1.53	.50	1.77	.42	2.42	.60	1.17	.38
Social welfare	15	1.93	.26	1.27	.46	1.40	.51	1.67	.82	1.00	.0
Anti-social	6	1.67	.52	1.83	.41	2.00	.0	2.50	.84	1.00	.0
Marital	25	1.72	.46	1.40	.50	1.56	.51	2.12	.53	1.32	.48
Job-related	8	1.13	.35	1.50	.53	1.63	.52	2.00	.53	1.25	.46

Table continues

Table 5 continued.

Problem type	n	Variable											
		CLINIASS*		MODINC		TIMSPINC		PHOMEMIN		NTSELFUBI		M	SD
		M	SD	M	SD	M	SD	M	SD	M	SD		
Psychological	79	1.19	.39	1.20	.40	2.62	1.10	1.75	1.19	2.41	1.88		
Legal	36	1.75	.44	1.11	.32	2.30	1.04	1.67	1.17	2.36	2.39		
Financial	20	1.80	.41	1.10	.31	1.85	.81	1.45	.76	2.10	1.97		
Addiction	57	1.23	.42	1.37	.49	2.95	1.09	2.74	2.57	3.61	2.76		
Social welfare	15	1.60	.51	1.07	.26	2.13	1.30	1.80	1.08	2.33	1.68		
Anti-social	6	1.17	.41	1.33	.52	2.83	1.47	1.17	.41	2.83	3.06		
Marital	25	1.16	.37	1.04	.20	2.48	.96	2.08	1.93	2.92	2.72		
Job-related	8	1.23	.35	1.13	.35	2.63	1.18	2.63	2.07	4.25	2.66		

\*Higher mean indicates reversed direction

Note. See Appendix F for full description of each variable.

for addiction and marital problems than for other problems ( $F = 2.71$ ,  $df = 245$ ,  $p < .01$ ).

#### Assessment Stage

Three kinds of exchanges are involved in the assessment phase of the EAP program: clinical assessment, short-term counseling and information exchange. Differences in the kind of exchange were examined with reference to problem type. It may be observed in Table 5 that clinical assessment is used most often for marital problems, followed by psychological and addiction problems ( $F = 12.61$ ,  $df = 245$ ,  $p < .001$ ). Information exchange was used less often for addiction problems, marital and psychological problems ( $F = 3.00$ ,  $df = 245$ ,  $p < .01$ ). No significant differences were found for short-term counseling and problem type.

#### Treatment Recommendation

The demographic characteristics associated with treatment recommendations made by EAP administrators were examined. Table L in the Appendix presents a discriminant analysis for three of the major recommendations: outpatient-clinic, outpatient-private and inpatient treatment. The means and standard deviations for each of these treatment recommendations are presented in Table 6. Inpatient treatment was more likely to be recommended under the following conditions: the older the client ( $F = 4.02$ ,  $df = 104$ ,  $p < .05$ ), the

Table 6  
Means and Standard Deviations for EAP Recommendations on Selected Variables

		Variable											
		LENGTSE		AGE		AFJOBPER		WAYATTEN*		WAYQUANT*			
	n	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Recommendation	22	3.95	1.83	36.32	8.04	2.36	.90	1.73	.46	1.64	.49		
Outpatient clinic	54	4.33	2.26	37.28	10.45	2.70	1.09	1.81	.39	1.65	.48		
Inpatient treatment	29	5.59	2.15	43.21	10.85	2.86	1.25	1.55	.51	1.52	.51		
<hr/>													
		PROBSEVE		CLINI <sup>1</sup> ASS*		SHORTE*		OPENSELF		OPENDEMO			
	n	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Recommendation	22	1.95	.58	1.09	.29	1.59	.50	3.00	.0	2.95	.21		
Outpatient clinic	54	2.11	.60	1.24	.43	1.61	.49	2.85	.45	2.87	.34		
Inpatient treatment	29	2.59	.57	1.38	.49	1.90	.31	2.99	.19	2.93	.26		
<hr/>													
		INCOME		PHONEMIN		TICPAFSA		COMPLGEN		COMPLFST			
	n	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Recommendation	22	2.32	.95	1.41	.67	3.18	2.04	2.82	.50	5.86	.47		
Outpatient clinic	54	3.26	1.85	1.74	1.31	3.98	2.69	2.48	.79	5.39	1.04		
Inpatient treatment	29	2.72	1.65	2.62	2.47	3.00	2.75	2.76	.64	5.72	.88		

\*Higher mean indicates reversed direction  
Note: See Appendix F for full description of each variable.

greater the length of service ( $F = 4.47$ ,  $df = 104$ ,  $p < .01$ ), and the more severe the problem ( $F = 8.76$ ,  $p < .001$ ). Less short-term counseling was used for inpatient treatment than both outpatient recommendations ( $F = 4.37$ ,  $p < .05$ ).

Inpatient treatment also was associated with more time spent in telephone follow-up than was true for other kinds of EAP recommendations ( $F = 4.09$ ,  $df = 104$ ,  $p < .05$ ).

Fewer significant findings were obtained for the other two treatment recommendations. For clients requiring outpatient-clinic, the most often used type of exchange was short-term counseling. Outpatient-private was associated with a higher income level ( $F = 2.84$ ,  $p < .10$ ).

#### EAP Administrators (Counselors): Correlates of Ratings

The president of the firm rated each of the 20 program administrators on four scales: genuineness, trustworthiness, expertise, and empathy. Product moment correlations were computed with each of these ratings and other measures included in the questionnaire. Table 7 presents the product moment correlations. This table may be inspected by the class of variables. The highest level of correlations appear to be found for time spent in initial contact: for instance, an  $r$  of .34,  $df = 388$ ,  $p < .001$  was obtained with rated level of trust. The use of media was found to be associated with trust and expertise. More face-to-face encounters



Table 7

## Intercorrelations of Ratings of EAP Administrators and Selected Variables

	Genuineness	Trustworthiness	Expertise	Empathy
Sex	-.04	-.06	.05	.00 <sup>a</sup>
Job level	-.08	.07	.02	-.01
Affect: Job performance	-.01	-.08	.09	-.03
Contacted EAP before	.00	.14**	.00	-.01
Single vs. multiple problems	-.06	-.12**	-.05	-.11**
Complexity of solution	-.17***	-.11**	-.18***	-.09*
Problem severity	-.00	.08	.11	.07
Information exchange	.09*	.24***	.25***	.06
Clinical assessment	.07	-.10*	.00	.09*
Short term counseling	-.02	-.05	.02	-.03
Referral made	.00	-.02	-.04	.02
Did client reveal self?	-.03	.13**	-.05	-.03
Did client reveal demographic data?	.01	.11**	-.06	.03
Income	.07	.02	.05	.12**
Accessibility to EAP office	.03	-.04	-.01	.03
Office hours convenient	.03	-.04	.12**	-.01
Availability of transportation	.09*	-.08	.03	.08*
Conducts on-site visits	.02	-.07	-.01	.10**
Telephone vs. face-to-face: Usage	.09*	.18***	.22***	-.03
Time spent in initial contact	.423***	.34***	.30***	.12**
Time in follow-up: Telephone	.08	.13***	-.01	.07
Time in follow-up: Face-to-face	-.18	.03	-.08	-.10
Number of follow-ups: Telephone	.12**	.04	-.02	.09*
Number of follow-ups: Face-to-face	-.03	-.07	-.05	-.03

\*  $p < .10$ \*\*  $p < .05$ \*\*\*  $p < .01$ \*\*\*\*  $p < .001$

took place in initial assessment, the higher the trust and expertise of the counselor. (See Appendix E for rating scales.)

Ratings also were examined in terms of assessment stages. Counselor traits were associated with information exchange. The more genuineness and trustworthiness, the more use was made of information exchange. But, no significant correlations were found between counselor ratings and clinical assessment, and short-term counseling, or whether referrals were made.

Counselor traits were related to problem characteristics. Higher genuineness ratings were associated with a tendency of the counselors to assess patients as requiring simple rather than complex solutions. In addition, a similar finding was obtained for the expertise rating. Moreover, the more the expertise of the counselor, the greater the perceived severity of the problem of the clients.

### Media and Stages in Helping Process

#### Initial Contact and Media

Initial contact is designated in this research as that early stage at which an assessment is made of the client's problem. By initial contact, then, I do not mean the first time that the client interacted with the program administrator. The medium used in the initial contact for the purpose of assessing the patient's problem

is of particular concern in this study. The media usage was examined in terms of number of contacts and time spent in minutes in the assessment process.

Problem Type. The type of presenting problem was found to be related to the medium used. Table 8 presents frequency and percent of medium by problem type. In general, face-to-face was used more for addiction than for psychological problems: 42% vs. 23%. Face-to-face was used least for marital problems (11%). Telephone was used more for marital (89%) than for addiction (58%).

#### Role of Media as a Moderator Variable

A major issue in this research is whether media can be viewed as a moderator variable. One way to demonstrate this is to find out if the intercorrelations differ from one sample to the next. Typically, research has examined whether gender is a moderating variable. This involves a separate analysis by sex. If the correlations are higher in the male sample than the female sample, it is inferred that sex is a moderating variable. Generally, this means that the level of prediction is higher when the data are treated separately by subgroup rather than by the total group.

In the present study separate analyses were conducted of those clients who were initially contacted by telephone and clients who were contacted initially face-to-face. Again, this is not

Table 8

Use of Media by Problem Type

	Total N	Media			
		Telephone		Face-to-face	
		<u>n</u>	Percent	<u>n</u>	Percent
Psychological	111	86	77.5	25	22.5
Legal	48	43	89.6	5	10.4
Financial	28	24	85.7	4	14.3
Addiction	91	53	58.2	38	41.8
Social welfare	26	23	88.5	3	11.5
Marital	37	33	89.2	4	10.8
Job related	22	17	77.3	5	22.7

necessarily the first contact, rather, it involves the time spent in the initial assessment phase.

Table 0-1 in Appendix 0 presents prediction of time spent in initial contact for the total sample.

Table 0-2 in Appendix 0 presents means and standard deviations of the independent variables by the media used in the initial contact involving assessment. Face-to-face communication was used more frequently under certain conditions--the poorer the job performance of the client ( $t = 4.03$ ,  $df = 325$ ,  $p < .001$ ); the greater the problem severity ( $t = 2.77$ ,  $df = 325$ ,  $p < .01$ ); the more the use of clinical assessment ( $t = 5.72$ ,  $p < .001$ ); the greater the access to the EAP office ( $t = 6.01$ ,  $p < .001$ ); the more convenient the office hours ( $t = 5.81$ ,  $p < .001$ ); the more available the transportation ( $t = 6.46$ ,  $p < .001$ ); the more the on-site visits ( $t = 3.41$ ,  $p < .001$ ); and the more the time spent in the initial contact ( $t = 11.82$ ,  $p < .001$ ). No significant differences were found by gender, job level, length of service, single vs. multiple problems, complexity of solution, the openness in revealing self, and by income level.

A further analysis was done to find out differences in level of prediction by media used in the initial contact. Table 0-3 in Appendix 0 presents the beta weights for telephone and face-to-face with selected variables for each of the two measures of compliance. The betas in this Table are not from a stepwise regression. This makes it possible to examine each pair of betas before entering each

variable into a formula that takes into account the relative contribution of each variable. It may be observed in Table 9 that different variables predict compliance according to which medium is used. It should be noted, however, that there were only a limited number of significant differences between the betas when t-tests were computed between the betas for telephone and face-to-face. For first appointment compliance, the beta for work quality was significantly higher for the face-to-face sample than for the telephone sample ( $t=2.50$ ,  $df=325$ ,  $p < .01$ ). For clinical assessment, the beta for face-to-face was higher than for telephone ( $t=2.53$ ,  $p < .01$ ). For overall compliance, the beta was higher for face-to-face than for telephone for work quantity ( $t=2.03$ ,  $p < .05$ ), for clinical assessment ( $t=3.32$ ,  $p < .001$ ), and for accessibility to the EAP office ( $t=2.50$ ,  $p < .01$ ).

In a second analysis, a backward elimination stepwise procedure was used (cutoff of  $F=.10$ ). The objective here was to identify the best level of prediction of compliance by telephone and face-to-face. Table 9 presents the prediction of compliance by media. - It may be observed in Table 9 for both measures of compliance that the variables most predictive of telephone were not the same as the variables most predictive of face-to-face. What is particularly dramatic is the level of prediction of compliance obtained for each of the two medium samples. For first appointment compliance,  $R^2=.08$  for telephone and  $R^2=.40$  for face-to-face

## Prediction of Compliance by Media

Note. See Appendix F for full description of each variable.

( $t=3.70$ ,  $df=279$ ,  $p < .001$ ). For overall compliance,  $R^2 = .07$  for telephone and  $R^2 = .40$  for face-to-face ( $t=3.83$ ,  $df=279$ ,  $p < .001$ ).

This increase in the level of prediction obtained by separate analysis (i.e., subgroup analysis), may be evaluated by comparing what was obtained for the total group and the levels obtained for each subgroup. As shown in Tables P-6 & P-7 in Appendix P the  $R^2$  for first appointment compliance was .09 and for overall compliance, it was .08. By subgroup analysis, an  $R^2$  of .40 was obtained for face-to-face. This suggests that the  $R^2$  for the total reduces or obscures the actual relationship for a significant part of the total sample—those initially contacted for assessment by face-to-face.

#### Follow-ups: Media Usage

Follow-ups in this study occurred after initial assessment and referrals were made. Such follow-ups take place to determine the level of satisfaction with appointment time, etc., and, perhaps, when there is reason to believe that the suggested actions may not be carried out. Two related measures of follow-up were used: time spent in follow-ups in minutes, and number of follow-ups.

A multiple regression analysis (Table O-4 in Appendix) was conducted using the time spent in minutes by means of the telephone ( $R^2 = .14$ ,  $df = 327$ ,  $F = 7.44$ ,  $p < .001$ ). The poorer the job attitude, the more the time spent in follow-up ( $F = 6.08$ ,  $p < .01$ );



the more severe the problem, the more the time spent ( $F = 7.69$ ,  $p < .01$ ); the more complex the problem solution, the more the time spent ( $F = 7.23$ ,  $p < .01$ ); the longer the waiting period, the more the time spent in follow-up ( $F = 23.56$ ,  $p < .001$ ). Additional analyses were conducted by job level. The higher the job the more time was spent in follow-up ( $F = 6.92$ ,  $p < .01$ ). More time was spent for union and executive levels than for salaried staff and managers ( $F = 4.72$ ,  $p < .01$ ). This finding also was obtained using face-to-face follow-ups.

Multiple regression analysis (Table 0-5 in Appendix) also was conducted using number of telephone follow-ups as the dependent measure ( $R^2 = .12$ ,  $F = 10.82$ ,  $df = 387$ ,  $p < .001$ ). The more complex the solution ( $F = 4.50$ ,  $p < .05$ ) and the more severe the problem ( $F = 4.53$ ,  $p < .05$ ), the more the follow-ups. In addition, the longer the waiting period before the person underwent treatment, the greater the number of follow-ups ( $F = 35.07$ ,  $p < .001$ ). Problems of addiction and marital difficulties also were associated with a greater number of telephone follow-ups ( $F = 2.71$ ,  $p < .01$ ) than were other problems.

#### Antecedents of Compliance

The third objective was to identify variables that are predictive of compliance. Table H-22 in Appendix H presents data on the level of compliance with first appointment. It may be observed

in this table that 64% of the clients complied with the first appointment. Table H-21 in Appendix H presents similar data using the overall measure of compliance. It may be seen in this table that 59% fully complied, 20% partially complied, and 20% did not comply.

#### Structural Variables

Job Level. Job level was examined with regard to compliance. Several different statistical techniques were used. The simplest technique involves frequency and percent compliance in Table 10. It may be seen in this table regarding overall compliance that the managers are more compliant (68%) than salaried staff (56%) and union members (58%). Table J-1 in Appendix J presents discriminant function analysis for compliance by job level; a trend was found ( $F = 1.65$ ,  $df = 247$ ,  $p < .10$ ). A further multiple regression analysis indicated that job level was associated with compliance, using the first appointment measure ( $F = 3.77$ ,  $p < .05$ ).

A more detailed analysis was done including different combinations of variables in the prediction of first appointment compliance. When sex was included, no main effects were found for either level ( $F = 1.22$ ,  $p > .05$ ) or sex ( $F = .29$ ,  $p > .05$ ). The interaction effects also were not significant ( $F = .71$ ,  $p > .05$ ). A further cross tabulation included level and problem type (Table P-2 in Appendix P). Again, no significant findings were obtained, which

Table 10

Compliance (overall) by Job Level

Job level	Total <u>N</u>	Compliance					
		Did not comply <u>n</u>	Percent	Partial compliance <u>n</u>	Percent	Full compliance <u>n</u>	Percent
Union	76	19	25.0	13	17.1	44	57.9
Salaried	267	56	21.0	61	22.8	150	56.2
Manager	50	7	14.0	9	18.0	34	68.0
Executive	17	2	11.8	4	23.5	11	64.7

would suggest that the effect of job level on compliance does not depend on problem type.

Marital Status. Table P-3 in Appendix P presents frequency and percent for overall compliance by marital status. The divorced are more compliant than the single: 70% vs. 52%,  $t = 2.03$ ,  $p < .05$ . No difference was found between divorced and married: 70% vs. 61%,  $t = 1.11$ ,  $p > .05$ . The possible impact of marital status was examined by problem type. Divorced persons complied more than did the single when the problem was psychological, but not when it was addiction or otherwise.

Accessibility to EAP Office. A series of analyses were done to assess the nature of the contribution of access to office with regard to compliance. Using the first appointment measure of compliance, a small relationship was found with accessibility ( $r = -.12$ ,  $p < .05$ ), suggesting that compliance was higher the closer the person was to the office. Using the overall measure of compliance, somewhat different results were obtained. The closer to the EAP office, the less the compliance ( $r = .24$ ,  $p < .05$ ). Why similar results were not obtained with these two compliance measures was not clear. Additional analyses were done.

A multiple regression analysis was conducted using different combinations of variables along with accessibility. In the first analysis, accessibility was included with the openness variable, that is, how revealing the client was about himself/herself to the

EAP administrator. For the overall measure of compliance, an  $R^2 = .13$  was found,  $df = 379$ ,  $p < .001$ . Accessibility had a highly significant main effect on compliance ( $F = 16.38$ ,  $p < .001$ ) as did openness ( $F = 7.56$ ,  $p < .001$ ). The interaction  $F$  was just short of significance ( $F = 1.88$ ,  $p < .10$ ). The interaction  $F$  did not seem high enough to warrant interpretation, a difficult task when using multiple regression techniques.

A second multiple regression analysis was done. For first appointment compliance, job level was included with accessibility. Job level made no significant contribution to compliance ( $F = 1.16$ ,  $df = 367$ ,  $p > .05$ ). Accessibility made no significant contribution ( $F = 1.53$ ,  $df = 367$ ,  $p > .05$ ). The interaction was significant, however ( $F = 2.26$ ,  $p < .05$ ). One possible interpretation of this interaction between job level and accessibility is as follows. Union and managers are similar in having less access to the EAP office than salaried staff and executives. But the managers have the highest level of compliance and the union members have the lowest level of compliance.

For the overall measure of compliance, somewhat different results were obtained. Job level had a significant main effect ( $F = 227$ ,  $df = 367$ ,  $p < .01$ ). Accessibility also had a significant main effect ( $F = 17.06$ ,  $p < .001$ ). The interaction was not significant ( $F = 1.08$ ,  $p > .05$ ).

The unexpected finding of a negative relationship between

overall compliance and accessibility to an EAP office resulted in further analyses being made. One possibility was that problem severity was related to accessibility to the office and that this might influence compliance levels. The first analysis established no differences in problem severity by compliance. For less severe problems, the compliance was 34.4%; for moderately severe problems, the compliance was 30.5%, and for crisis problems the compliance was 34.2%. A second analysis looked at compliance by problem severity and accessibility. For low accessibility, 61.3% of the less severe clients complied; 63.3% of the moderately severe clients complied, and 66.0% of the crisis stage clients complied. This suggests, then, that compliance does not vary under low accessibility conditions as a function of the severity of the problem.

Problem Characteristics. Table P-1 in Appendix P presents compliance by problem type. It may be observed in this table that compliance does not differ by problem type. Multiple regression analyses were conducted to detect the contribution of problem severity in the prediction of each of the two compliance measures. In the first regression analysis, problem severity was somewhat related to first appointment compliance ( $F = 3.36$ ,  $df = 327$ ,  $p < .10$ ). For overall compliance, however, problem severity made no significant contribution ( $F = 1.41$ ,  $p > .05$ ).

Compliance was greater when the problem was multiple rather than single using the first appointment measure: a borderline

significance was found ( $F = 2.82$ ,  $df = 327$ ,  $p < .10$ ). For overall compliance, a more significant  $F$  was found ( $F = 7.52$ ,  $df = 335$ ,  $p < .01$ ). Compliance, then, appears to be more associated with multiple than single problems.

#### Stages in Helping Process

Referral Source. A major question regarding compliance in the work place is whether the level of compliance varies with the source of the referral. Do people comply more when they volunteer for help as compared to when someone in the authority structure suggests and insists that the person seek help? The four categories used in this research were voluntary and three categories of nonvoluntary: management suggested, urged and firm. The firm category is the most intense.

A discriminant analysis was conducted that included most of the variables and these four referral sources. Table K-1 in Appendix K presents the results of the discriminant analysis. Table 11 presents means and standard deviations of those variables identified by the discriminant analysis as significantly differentiating the four kinds of referral. It may be observed in Table 11 that the most intense referral, the firm referral, was associated with job performance; that is, the poorer the overall performance, the more likely this kind of management referral ( $F = 22.12$ ,  $df = 248$ ,  $p < .001$ ). This "firm" referral also was associated with the problem of attendance ( $F = 14.78$ ,  $p < .001$ ).

Table 11

Means and Standard Deviations for Referral Source on Selected Variables

		Variable											
	n	SEX		LENGT SER		AFJOBPER		WAYATTEN *		WAYQUALI *			
		M	SD	M	SD	M	SD	M	SD	M	SD		
Referral source													
Voluntary	208	1.53	.51	4.51	2.33	2.28	1.10	1.85	.36	1.67	.47		
Suggested	12	1.58	1.16	3.50	1.78	3.08	.79	1.67	.49	1.75	.45		
Urged	8	1.13	.35	6.75	2.18	3.88	.35	1.38	.52	1.25	.46		
Management referral	21	1.19	.40	5.62	2.22	3.90	.44	1.33	.48	1.19	.40		
	n	WAYQUANT *		WAYRELAT *		WAYATTIT *		NATUPROB		PROBSEVE			
		M	SD	M	SD	M	SD	M	SD	M	SD		
Referral source													
Voluntary	208	1.72	.45	1.80	.40	1.69	.52	1.42	.51	1.95	.70		
Suggested	12	1.67	.49	1.50	.52	1.75	.45	1.67	.49	2.25	.62		
Urged	8	1.25	.46	1.38	.52	1.38	.52	1.75	.46	2.00	.93		
Management referral	21	1.29	.46	1.48	.51	1.48	.51	1.52	.51	2.57	.51		

Table continued



Table 11 continued

		Variable											
Referral source	n	CLINIASS*		OPENDEMO		MODINC		TIMSPINC		PHOMEMIN		M	SD
		M	SD	M	SD	M	SD	M	SD	M	SD		
Voluntary	208	1.39	.49	2.88	.37	1.13	.34	2.45	1.08	1.88	1.55		
Suggested	12	1.17	.39	3.00	.0	1.50	.52	3.50	1.31	3.33	2.87		
Urged	8	1.00	.0	2.63	.52	1.38	.52	2.50	1.31	2.50	2.73		
Management referral	21	1.19	.40	8.86	.36	1.57	.51	2.76	1.13	1.95	1.83		

\*Higher mean indicates reversed direction

Note. See Appendix F for full description of each variable

The kind of referral also was associated with the time spent in initial contact. More time was spent in face-to-face than in telephone follow-ups when the firm referral was used ( $F = 12.75$ ,  $df = 248$ ,  $p < .001$ ). Overall, more time was spent under management suggestion than for the other types of referrals ( $F = 3.77$ ,  $p < .01$ ).

Table P-4 in Appendix P presents compliance (overall) by referral source. No significant differences were found in the degree of compliance as a function of referral source. The possibility was considered that job level might make a difference, depending on whether the referral was nonvoluntary or voluntary. Table 12 presents frequency and percent of compliance (overall) by referral source and job level. Again, no significant differences were found. A further analysis was conducted, looking at the same variables with the addition of the type of problem. Again, no significant differences were found. For purposes of illustration, let us look at these variables when cross tabulated by problem type, more specifically, psychological problems. For the union members who volunteered, 32.4% complied, as compared to 22.2% who did not volunteer. For the other three job levels, of those who volunteered, 35.6% complied, of those who did not volunteer, 28.9% complied. In brief, correlates of referral source do not appear to make much of a difference with regard to compliance.

Referral Initiation. Table 13 presents compliance by referral initiation. It is evident in this table that clients are least

Table 12

Frequency and Percent of Compliance (Overall) by Referral Source and Job Level

Job level	Non-compliance				Partial compliance				Full compliance			
	Voluntary		Non-voluntary		Voluntary		Non-voluntary		Voluntary		Non-voluntary	
	n	%	n	%	n	%	n	%	n	%	n	%
Union	14	24.1	2	20.0	8	15.1	3	18.8	33	49.5	9	17.0
Salaryed	37	63.8	6	60.0	36	67.9	10	62.5	107	63.3	31	58.5
Manager	5	8.6	2	20.0	7	13.2	1	6.3	24	14.2	8	15.1
Executive	2	3.4	0	0.0	2	3.8	2	12.5	5	.03	5	9.4
Total	58	100%	10	100%	53	100%	16	100%	169	100%	53	100%

Table 13

## Compliance (overall) by Referral Initiation

Referral initiation	Total N	Compliance			
		Did not comply		Fully complied	
		n	Percent	n	Percent
Client clearly asked for appointment with resource	101	16	15.8	11	10.9
Client suggested referral after discussion	16	3	18.8	3	18.8
Administrator suggested referral after discussion and client responded affirmatively	214	29	13.6	50	23.4
Administrator raised referral and client deferred, waffled or refused	65	34	52.3	15	23.1
No referral necessary	33	3	.09	9	27.3
				16	24.6
				21	63.4

likely to comply when the administrator makes a referral and the client defers. When the client asks for an appointment, there is the highest level of compliance (73%). But no difference was found when either the client or the administrator suggests a course of action following discussion (63% vs. 63%).

EAP Treatment Recommendations. Does the degree of compliance differ according to the nature of the treatment recommendation made by the EAP administrator? (Table P-5 in Appendix P). Table 14 presents the frequency and percent compliance (overall) by EAP treatment recommendation and problem severity. First, let us look across totals to assess compliance by type of recommendation. Not all recommendations are listed in this table, but the four main recommendations making up 77% of the recommendations made are: self-help, outpatient-private, outpatient-clinic, and inpatient treatment. Some differences in rate of compliance (overall) were found. The highest level of compliance was found for inpatient treatment (78.5%), followed by outpatient-clinic (70.2%). The lower levels of full compliance were found for outpatient-private (51.5%) and self-help (51.1%). Inpatient treatment compliance was significantly higher than outpatient-private ( $t = 3.47$ ,  $df = 231$ ,  $p < .001$ ), and self-help ( $t = 2.91$ ,  $df = 231$ ,  $p < .01$ ). Outpatient clinic was significantly higher than outpatient private ( $t = 2.07$ ,  $p < .05$ ); and outpatient-clinic was significantly higher than self-help ( $t = 1.80$ ,  $p < .10$ ). The issue of problem severity was

Table 14

## Frequency and Percent of Compliance by EAP Treatment Recommendations and Problem Severity

Problem severity	EAP treatment				Recommendation			
	Self-help		Outpatient private		Outpatient clinic		Inpatient treatment	
	n	Percent	n	Percent	n	Percent	n	Percent
Less severe								
Did not comply	2	4.3	8	8.2	1	2.7	0	0
Partial compliance	2	4.3	4	4.1	0	0	1	2.0
Full compliance	7	14.9	8	8.2	5	13.5	0	0
Moderately severe								
Did not comply	4	8.5	15	15.5	5	13.5	5	9.8
Partial compliance	9	19.1	14	14.4	4	10.8	0	0
Full compliance	10	21.3	31	32.0	16	43.2	14	27.5
Crisis								
Did not comply	1	2.1	2	2.1	1	2.7	3	5.9
Partial compliance	5	10.6	4	4.1	0	0	2	4.0
Full compliance	7	14.9	11	11.3	5	13.5	26	51.0
Total N	47	100	97	100	37	100	51	100

further examined. For moderately severe problems, partial compliance was higher for the self-help group (19.1%) than for the inpatient treatment group (0%) ( $t = 3.17$ ,  $df = 41$ ,  $p < .001$ ). For full compliance, the outpatient-clinic compliance was higher (43.2%) than for the self-help group (21.3%) ( $t = 2.14$ ,  $df = 47$ ,  $p < .05$ ).

For crisis level problems, differences were found for full compliance. The inpatient treatment compliance was higher than for outpatient-clinic ( $t = 4.13$ ,  $df = 87$ ,  $p < .001$ ); higher than for outpatient-private ( $t = 5.11$ ,  $df = 147$ ,  $p < .001$ ), and higher than for self-help groups ( $t = 4.10$ ,  $df = 97$ ,  $p < .001$ ).

The degree of problem severity appears to make a difference, then, when considered along with treatment recommendation, but it is not a simple one-to-one relationship. More compliance was found for moderately severe problems than for either the less severe or crisis. The major exception was found with regard to inpatient treatment, where compliance increases with the severity of the problem.

EAP Counselor Ratings. Table 15 presents product moment correlations ratings between EAP program administrators and two measures of compliance. It may be observed in this table that the ratings given the counselors by the president of the firm on genuineness, trust, expertise, and empathy are not significantly related to compliance.

Canonical Analysis of Structural and Process Variables.

Table 15

Correlations between EAP Program Administrators (Counselors) and  
Compliance

---

	Compliance	
	First appointment	Overall
Genuineness	-.04	-.07
Trust	.10	.05
Expertise	-.01	-.02
Empathy	.01	-.01

---

Note. N = 355 for first appointment and 388 for overall.



Canonical correlation analysis is used when there is more than one dependent measure to be analyzed at a time. One set of variables is designated as independent and another set as dependent, and the assignment of such labels is somewhat arbitrary. The objective of canonical analysis is to determine the magnitude of the relationship between two sets of variables, to derive linear combinations of the variables that are maximally correlated, and to explain the nature of the relationships between the two sets of variables by looking at the relative contribution of each variable to the function.

Correlations of the variables with the functions is used to interpret relationship. This is preferable to the use of canonical weights generated for best prediction. The analysis presented here relies on such correlations. The significance of the functions generated can be assessed in several ways, including examination of the size of the canonical correlation ( $R$ ) between the two sets of variables; the level of significance of the function and the percent of overall variance accounted for by the function. The main canonical table for the below analysis can be found in Appendix Q.

The variables treated as the dependent variables in the below analyses included the compliance measures, as well as several variables involving the media. Three functions were identified that had significant canonical correlations. The first function accounts for 47% of the variance. The main dependent variable here was time spent in initial contact. This variable had a correlation of .91 on

the covariate. Time spent in follow-up also was significant. The correlations of the independent variables on this first function were as follows. Clinical Assessment had the highest correlation (-.54), followed by Problem Severity (.48). Significant correlations also were found for the variables involving different aspects of the job. What this function seems to tap is the relationship between various problem characteristics and the amount of time spent in initial contact, and in the follow-up stage of the helping process. Essentially, more time is spent under several conditions: the greater the problem severity, if clinical assessment is used, and if the job has been affected.

The second function has a canonical correlation of .47 and accounts for 22% of the variance. The dependent measures here involve the overall measure of compliance. The independent variables associated with this second function include job level, problem characteristics, and accessibility to the EAP office. The pattern seems to involve antecedents of the overall measure of compliance. Compliance was associated with higher job levels, single instead of multiple problems, more complex solutions, and less access to the EAP office. The third function generated a canonical correlation of .39 and accounts for 15% of the variance. The dependent measures essentially were compliance with first appointment, and number of telephone follow-ups. The independent variables included referral made, openness, severity of the problem,

and male gender. Compliance appears to be greater, then, when referrals are made, the client is open, the client is male, and the client has a severe problem.

#### Nonpredictors of Compliance

A number of variables that were found to be predictive of compliance in prior studies were not found to be predictive in the present study. Sex differences were not important with regard to compliance. Males complied more than females (63% vs. 55%), but the difference was not significant. Age was not related for first appointment compliance ( $r = .04$ ). Income was not related to first appointment compliance ( $r = .04$ ) and had a negligible relationship with compliance overall ( $r = .10$ ,  $p < .05$ ).

#### Comparison of Regions on Selected Variables

The four regions were compared. These regions were: Northeast, West, Southwest and Midwest. An examination was made of the means following a discriminant analysis. Each of the regions is described below in terms of the factors that were either most or least characteristic of it. (Table R-1 in Appendix).

Northeast. This region appears to have clients with the most severe problems. Considerable use is made of clinical assessment, perhaps, in keeping with problem severity. Of the four regions, the Northeast has the fewest problems with regard to getting to the EAP

office. There was the highest access to the office, office hours also were convenient, and transportation was most available as compared to the other regions. More time was spent in face-to-face in the initial stage involving assessment than in other regions. In addition, administrators in this region made the greatest number of telephone follow-ups.

West. This region generally was in the middle on most dimensions, being less often the most or the least. What is characteristic of the West in terms of these extreme measures is that the least amount of time is spent on follow-ups by telephone. In addition, the fewest number of telephone follow-ups occurred. Moreover, the waiting time for an appointment with a recommended resource was shorter in the West than in the other regions.

Southwest. What characterizes this region is that the problems characteristic of the clients are likely to be multiple rather than single, and require more complex solutions. Fewer on-site visits were made in this region. But the amount of time spent in follow-up by telephone was the highest of any region.

Midwest. The data for this region are less reliable than for the other three regions since only 21 cases were included in the analysis. What characterizes this region is that the clients seem to have problems that were related to the job. More clients had problems with regard to quality of work, with regard to poorer job attitudes and in relationships with fellow employees on the job. Of

interest, is that the highest level of openness was found for the clients in this region. They were more revealing about self than were clients in other regions. A problem in this area existed with regard to the opportunity to establish contact with the EAP office. The lowest access to office was reported in this region; office hours were perceived to be the least convenient to the clients. But there were the most on-site visits here. Moreover, more time was found to be spent in the initial contact involving assessment than was the case in the other three regions.

## CHAPTER IV

### DISCUSSION

#### Structural and Process Variables

The first objective of this study was to examine the interrelations between the structural and process variables. The process variables refer to the variables associated with each of the different stages in the helping process. This stage-orientation was stimulated by observations made by Erfurt and Foote (1977) who described these stages as including identification of an employee, intake evaluation, counseling, referral and follow-up.

Program Characteristics. Two types of problems have generated the most significant relationships for this study: these include psychological problems and addiction problems. These problems have an impact on the job in terms of overall performance, and attendance. As compared to other problems, they are characterized as being more severe, multiple rather than single, involving more complex solutions, and requiring a greater time commitment in follow-ups.

Face-to-face was found to be more characteristic of assessment in initial contact with addiction cases than in other kinds of problems. What is not clear from the present study is whether this is a result of the client's or the administrator's perception.

Perhaps, the administrators operate on the assumption that addiction cases require more face-to-face contact. This could be due to a belief that persons with addictions are given to denial mechanisms and that a complete picture is difficult to obtain from a telephone conversation.

Counselor Ratings. The characteristics of EAP administrators were hypothesized to influence the various stages in the helping process. Four characteristics were included: genuineness, trustworthiness, expertise and empathy. The correlations generally were somewhat higher for the variables associated with the initial contact. This suggests that individual differences among counselors have more of an impact in the initial stage than in later stages. Somewhat surprising was the positive relationship between genuineness and the reliance on information exchange. A more apparent finding, which was not obtained, would have been that genuineness was related to clinical assessment or short-term counseling. What was found was that genuineness, as well as expertise, were related to the perception that simple rather than complex solutions were indicated. The less the expertise, then, the more likely the administrator was to see the solution as being more complex. On the other hand, the greater the expertise, the greater the tendency to view problems as more severe rather than less severe. Empathy was found to have less overall predictive value than other ratings. Perhaps, empathy is more important for

the treatment stage than the problem diagnosis stage, that is, in the stages following assessment.

#### Media and Stages

The second objective was to examine the relationship between media usage and stages in the helping process. The media include telephone and face-to-face. The stages range from initial contact to follow-up.

#### Telephone vs. Face-to-face

The subgroup analysis by medium used in initial contact was done as part of the second objective to evaluate the role of the media both in relationship to antecedent variables as well as the dependent measures of compliance. The time spent in initial contact was found to be a variable accounting for considerable variance according to the results from the canonical analysis. From a more conceptual perspective, the well known idiom by McLuhan that the "Medium is the message" seems relevant here. This idiom suggests that we should not isolate the content from the vehicle used to transmit the message. The medium itself may have some consequences for what is communicated. Essentially then, there may be a problem in trying to separate findings from the larger communication context in which they occur. The results of the present study are consistent with the caveat, in that it was found that a much higher



level of prediction can be obtained by looking separately at the clients involved in face-to-face communication vs. the clients involved in telephone communication.

#### Time Spent on Phone in Follow-up

Follow-up is an important stage in the helping process. In the present study, follow-up by phone in minutes was a fairly predictable subcriterion. Many correlations were found. For instance, it appears that the amount of time increases with problem characteristics. The more time spent in the follow-up, the more severe the problem.

It is not clear why the time spent on follow-up is important. Perhaps, such follow-ups communicate an interest in the client by the administrator. Hence, the client may have more motivation to comply just because someone is interested. Follow-ups also may tend to inhibit procrastination. Follow-ups may prompt action because the client may begin to feel guilty at his or her appearance of ingratitude.

#### Media Usage and Compliance

No difference was found with regard to the administrators' media usage and compliance. What was dramatic, however, was the difference in when either medium was used. Face-to-face appears to be used more often when clinical assessment is involved; when

problems are severe; and for problems requiring more complex solutions.

#### Vulnerability and Media Usage.

Some research has suggested that people prefer to negotiate by telephone when the situation is somewhat embarrassing or fosters a sense of vulnerability (Sinaiko, 1963). An unexpected finding was the lack of difference in media usage and openness of the client. The level of revealing about self or demographic variables was about the same for both telephone and face-to-face. As a predictor of compliance, openness was one of the best antecedent variables. Openness was related to compliance, when measured in time spent in the initial contact, only when examined in terms of telephone. Fewer differences were found for openness and face-to-face with regard to compliance. It appears, then, that actions to increase openness in using the telephone may have some positive effects on compliance. These results may be compared with Janofsky (1970) who found that there were nonsignificant tendencies for self disclosure to be higher in face-to-face than through audio only.

#### Antecedents of Compliance

The third objective of this study was to identify some of the antecedents of compliance. The variables used were derived from a review of the literature on compliance and the specific issues

underlying this study. It is important to note that this study dealt with referral compliance rather than treatment compliance. Much of the previous work on compliance has dealt solely with treatment to the neglect of referral compliance (Poote & Erfurt, 1984). In this section we will look at some antecedents of referral compliance. They will include job level, marital status, age, sex, problem type, waiting period, referral source and referral initiation.

Job Level. Somewhat different results were obtained with job level as an antecedent variable. The overall trend is for compliance to increase with job level, but the results are not consistent. Part of the problem is that the job levels used in this study: union, salaried staff, managers and executives are not homogeneous groups. This is particularly the case with union members. Some union members make more money than salaried staff and even more than some managers. The union personnel often represent highly technical people. The overlap between levels, then, may reduce the contribution of this variable. It should be noted that a "purer" measure, that is, income showed a negligible relationship to compliance.

Insofar as job level is an indicator of socioeconomic status, the results are somewhat consistent with research indicating that compliance increases with socioeconomic status (Baekeland & Lundwall, 1975).

Marital Status. Marital status also was examined as an antecedent condition. The results were not as expected in that the divorced group was found to be the most compliant, particularly when the problem was a psychological one or that of addiction. The contribution of this variable to compliance in the research literature is not evident from data examined.

Age. Age, however, has received considerable attention. Baekeland and Lundwall (1975), in a review of the literature, found some support for this variable, in that compliance increases with age. The present study found no support for age as an antecedent condition of compliance.

Sex Differences. Research on sex differences suggest that males comply more than females with regard to treatment. The present study found no sex differences for referral compliance. Sex was used in cross tabulations with other variables, such as job level, but controlling for other factors did not make any significant difference.

Problem Type. Problem type has not received much attention in the literature because of the methodological difficulty in making comparisons across problems. The present study probably had a somewhat larger sample than many other studies. But the numbers for each of the problem types were not sufficient for detailed analysis. Several kinds of problems, however, had sufficient numbers for study, in particular, psychological, addiction and

marital. No difference was found with regard to compliance and problem type. Efforts to reach persons with the less common problems might increase the utilization of the employee assistance program. It appears useful to seek to increase the penetration rate for a wider range of problems. I suspect that the incidence of problems included in the present study does not necessarily reflect the incidence in the general population. What is not known is the degree to which the larger number of psychological and addiction problems found in this study simply reflects the fact that EAP administrators are mental health professionals with backgrounds in both psychotherapy and substance abuse (addictions).

Waiting Period. The waiting period has been found to be important with regard to compliance (Haynes, et al., 1979). In the present study, waiting period was not directly related to compliance. It should be noted, however, that waiting period was part of a configuration of variables associated with overall compliance.

Referral Source. Referral source also has been investigated in prior studies. The rationale here is that the level of motivation to carry out the recommendation is associated with the extent to which the person volunteers or is pressured to seek help. Heyman (1976) contends that whether a person volunteers or not makes little difference in staying with the treatment. In the present study involving referral rather than treatment compliance, similar

results were obtained to those of Heyman. In contrast to the intuitive feeling, however, that volunteering makes a difference, no difference was found; the same level of compliance was noted. One possibility is that the intensity of motivation, rather than the source, is important. It could be that both self referrals and management referrals lead to the same intensity of motivation. The argument or assumption behind the belief that volunteering is important includes the notion that self-referrals seek assistance earlier in the problem stage and that the earlier a person seeks help, the better the outcome. Preventive strategies are assumed to be effective. A related assumption is that people who volunteer are more internally motivated and that internal motivation is more likely to prompt action. The present study indicates, instead, that management should not hesitate to suggest (or even insist) that an employee seek help. There is no basis from the present study for concluding that such pressure would have a negative effect on compliance. It should be noted that the referral source has some implications. It was found that management referrals, particularly, those that are firm, tend to get more attention, at least with regard to time spent in initial contact.

Referral Initiation Referral initiation also has been examined. Research suggests that clients comply more when they ask for a referral. In the present study, we found this to be so, but, of significance was the finding that, after discussion, it seems to

make little difference who asks for the referral. The same level of compliance was obtained whether the client or the administrator suggested a referral.

Treatment Recommendation The highest level of compliance was found with regard to inpatient treatment. Persons given this kind of recommendation are likely to have a more serious problem, and possibly because of it, to be better motivated than clients given other recommendations.

The high level of compliance found with outpatient-clinic, however, was unexpected. Research has shown, instead, that compliance is greater when a client is referred to an individual (i.e., to someone in private practice), than to a clinic. This was not found in the present study.

We looked at differences in terms of problem severity and type of recommendation. The results are not clear cut. Less compliance was found for least severe and crisis levels. Most compliance occurred for moderately severe problems. This was characteristic of out-patient clinic and out-patient private. An exception was found for inpatient treatment, where there was a step-by-step increase in compliance with increases in problem severity. The reasons for the curvilinear relationship for outpatient treatment are not clear. One possibility is that the motivation is low when the problem is perceived as relatively minor. At the other extreme, there may be less confidence in the possibility of successful outcome when the

problem is most severe.

#### Ratings of EAP Administrators (counselors)

Williams (1977) observed that attraction and trust were related to task outcome. Other researchers have found that counselor characteristics are related to outcome and other intervening process variables. Dickman and Emener (1982) found that attributes of an EAP critical for success include anonymity, trust and easy access. In the present study, compliance was not found to be related to the ratings given to the 20 counselors involved in this study. Ratings were more related to process variables than outcome variables. It should be repeated that prior studies have dealt largely with treatment compliance while this study focussed on referral compliance. There is a problem in generalizing from treatment outcome to referral outcome. It should be noted, however, that other factors may be involved. In particular, it is possible that the selection of the counselors was such that the level for all of them is above the minimum essential for achieving compliance. The restriction in range, then, could be a factor in the insignificant findings.

The results discussed above permit constructing a thumbnail sketch of compliers and noncompliers. The result is a profile of compliers. For first appointment compliance, the significant variables were job level, marital status, openness, accessibility,



prior use of EAP, and problem severity.

The profile then would be of a manager who is divorced, who has a serious problem, who has used the EAP before. A noncomplier would be a single, union member who is a private sort of person, who has easy access to the EAP office.

For overall compliance, the picture is of a manager with multiple problems, who is an open kind of person, and is not too accessible to an EAP office. The lower compliance person would be a union person, with a minor problem, who is concerned with the privacy of information about himself, and who has easy access to the EAP office.

Finally, with regard to the antecedents of compliance, what can be concluded? What are the predictors of compliance? The present research suggests that this is too simple a question. The major consideration is the measure of compliance used. In the present study there was little relationship between the two measures. Different variables predicted each of the two measures.

The communication context warrants even more consideration. Different levels of prediction were obtained by examining the antecedent conditions of compliance in separate analyses. This involved a subgroup analysis of the two media subgroups, that is, the clients in the face-to-face group and the clients in the telephone group in the initial contact involving assessment. The relatively high level of prediction of compliance by the variables

in the face-to-face group and the relatively low level of prediction of compliance by the variables in the telephone group suggests that the media are having some moderating effect on the relationship between antecedent conditions and compliance.

#### Regional Differences

Among the more dramatic results obtained in this study are the regional differences. While there is not a major body of data on regional differences, common observation and intuition have generated various conceptions about the big city easterner, the midwest types, the southerners and the westerners. In the present study, many differences were found. In particular, for instance, the clients in the northeast region appear to have more severe problems. Why this is so is beyond the scope of this study. Perhaps, it reflects a more dense population, or more crowding, or a faster pace of life. It was found that problem severity is associated with more face-to-face contact. This kind of relationship was evident in the northeast region. But, the reasons underlying regional differences are probably quite complex, and cannot be interpreted readily without additional data.

#### Limitations of Study

The first limitation involves the sample. The total sample of

456 was adequate for overall analyses, but was insufficient for some of the cross tabulations, in particular, with regard to problem type.

The second limitation was with regard to the EAP administrators in filling out the questionnaire. There is the possibility here of self-enhancement, or self-protection. There is likely to be some bias built in when a person reports on data that may have some impact on his/her later job evaluation. There also is the possibility of preselection of cases, e.g., reporting on the more successful ones. A glossary was provided to facilitate standardization of responses, but it is not known to what degree the administrators were consistent in the interpretation and completion of the questionnaire items.

The third limitation is with regard to the ratings made of the 20 administrators. The problem here is the lack of information on the reliability of the ratings. Only one person was involved in the rating process. No one else had sufficient knowledge of all 20 administrators to do so. A second person would have been desirable. An examination of the ratings suggests there possibly was a considerable leniency error, the ratings generally were quite high, and a limited range seems likely to result in an underestimation of the real relationships. However, the similarity equally might result from the fact that the rater is a primary figure in hiring and retaining the administrators. The rating thus

may accurately reflect an ongoing screening for quality staff.

The fourth limitation is tied in with the use of a questionnaire. The lack of any experimental manipulation makes it impossible, in most instances, to say anything about the direction of causality. It is difficult to say, then, to what extent any of the antecedent variables actually led to higher compliance.

The fifth limitation exists with regard to the measures of compliance, the scales used were ordinal scales. It is not clear whether the scales were sensitive enough to pick up small, but important differences. In addition, it seems necessary to relate these scale responses with behavioral data on compliance. External measures of compliance are essential. Moreover, there is limited information with regard to the relationship between referral compliance and treatment compliance. Just getting to the resource person is essential, but not sufficient for generating real change in a client's condition. It would be useful, for example, if there was some kind of follow-up to the treatment stage. Did a client follow the recommendation made by the psychiatrist, for instance, and, if so, was there a significant improvement in the problem?

A sixth limitation concerned the media. It is important to note that this study did not directly involve the client's use of media, but rather the administrator's use of the media. However, clients may have participated in initiating contact by one medium or the other. Such data, however, were difficult to isolate. The data

collected on media, then, are of limited relevance for assessing how to reach a larger audience or a larger number of clients. Moreover, the data are limited to the use of media; less information was obtained regarding the actual effectiveness of the media employed.

A seventh limitation involves the kind of generalizations that properly may be made regarding the lack of media differences in compliance. Caution is essential here because various unknown factors may be involved. It would be premature to generalize from the results obtained using the present sample. It certainly is not a cross-section of the larger population. There may be biases involved, such as the heavier numerical weight for high level personnel. There may be self-selection factors with regard to media usage that need further attention. For instance, people with ready access to the telephone--desk phone and/or private office--may differ in important ways from people with limited access to the telephone, such as factory workers in manufacturing plants.

#### Action Implications

The results of the study have several potential action implications. The limitations of this study, however, should be considered before initiating action. Certainly, more research is needed to provide a better data base for action. For instance, research regarding accessibility to the EAP office raised a number

of questions. The parameters associated with distance have yet to be established. Variables other than the ones examined may be critical with regard to the relationship between accessibility and compliance.

Possible approaches for EAPs suggested by this study are:

Openness. Reduce any feelings of vulnerability that the client may have because of the problem itself. Such feelings, insofar as they reduce openness and self-disclosure, may inhibit the likelihood of compliance. Efforts, in particular, to maximize openness in using the telephone may have positive benefits.

Problem Type. Give more attention to problems that are receiving less attention than are psychological and addiction problems. The similar rates of compliance for non-mental health type problems suggests that EAPs continue to service these other problem areas, e.g. , legal and financial.

Referrals. If, indeed, the nonvoluntary clients comply as frequently as the voluntary clients, the need to minimize management referrals may not be very important. Managers should be encouraged to pursue such recommendations on the assumption that the employee may act on it.

Use of Media. The negligible media differences with regard to compliance suggests that further consideration be given to differential costs in using each medium. Be more selective with clients approached by each medium. For instance, continue to give

emphasis to face-to-face, as is apparently being done, for those cases where the problem is severe.

Compliance. This study has identified some of the characteristics of high and low compliers with EAP recommendations. It seems important that increasing attention be given to reinforcing those persons who are compliant and changing the behavior of the non-compliers. A target audience approach for the latter stage should focus on lower job level personnel with less severe problems who are single and private kinds of people.

## APPENDICES



APPENDIX A

EAP CASELOAD REPORT

Vol 1 Union 7

Sug 2 Sal'd 8

Urg 3 Mgr 9

Ref 4 Exec 0

Male 5

Female 6

### EAP CASELOAD REPORT

Closing Date \_\_\_\_\_

Est. time spent \_\_\_\_\_

Total # contacts \_\_\_\_\_

# Mgmt contacts \_\_\_\_\_

# In person contacts \_\_\_\_\_

Case # 102

Code # \_\_\_\_\_

Opening Date \_\_\_\_\_

S	M	T	W	T	F	S
1	2	3	4	5	6	7
Hour _____				AM	By _____	
				PM		

CLIENT \_\_\_\_\_ DIVISION \_\_\_\_\_ LOCATION \_\_\_\_\_

Presenting Problem # \_\_\_\_\_ Other Problems # \_\_\_\_\_

EMPLOYEE'S NAME \_\_\_\_\_ PHONES: Do not call: home \_\_\_\_\_ work \_\_\_\_\_

Employee's Address \_\_\_\_\_ Home \_\_\_\_\_

County \_\_\_\_\_ Zip \_\_\_\_\_ Work \_\_\_\_\_

Job title \_\_\_\_\_ Salary \_\_\_\_\_ LOS \_\_\_\_\_ Age \_\_\_\_\_

Name of Manager \_\_\_\_\_ Supervisor \_\_\_\_\_ : \_\_\_\_\_ Phone \_\_\_\_\_

Status: Single 1) Married 2) Separated 3) Divorced 4) Widowed 5) Partnership 6)

Children: Age \_\_\_\_\_ M / F; Age \_\_\_\_\_ M / F; Age \_\_\_\_\_ M / F; Age \_\_\_\_\_ M / F; Age \_\_\_\_\_ M / F

INSURANCE COVERAGE \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_ Relationship \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_ Phone \_\_\_\_\_

Insurance Coverage \_\_\_\_\_ Salary \_\_\_\_\_ Can we contact? \_\_\_\_\_

How did you  
hear of EAP?

- 1 Literature
- 2 Wallet card
- 3 Boss
- 4 Fellow Emp
- 5 Seminar
- 6 \_\_\_\_\_

Does the problem  
affect job per-  
formance?

- 1 Not at all
- 2 Minimally
- 3 Moderately
- 4 Severely

In what way?

- 1 Attendance
- 2 Work quality
- 3 Work quantity
- 4 Relationships
- 5 Attitude

Call initi-  
ated by:

- 1 Employee
- 2 Spouse
- 3 Partner
- 4 Relative
- 5 Friend
- 6 Manager
- 7 Med Dept
- 8 Pers Dept
- 9 \_\_\_\_\_

Concerning:

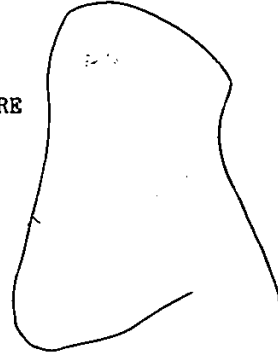
- 1 Self
- 2 Employee
- 3 Spouse
- 4 Partner
- 5 Child
- 6 Parent
- 7 Boss
- 8 Relative
- 9 Friend
- 0 \_\_\_\_\_

Have you contacted EAP before? Yes \_\_\_\_\_ No \_\_\_\_\_

When? \_\_\_\_\_ Prior case # \_\_\_\_\_

APPENDIX B

COMPLIANCE QUESTIONNAIRE



Compliance QuestionnaireCircle Relevant Number

(INSTRUCTIONS:) It is important that you fill in all responses. If there are extenuating circumstances you wish to add, please write in your comments.

I. PROBLEM TYPE AND SEVERITY:Nature of Problems:

1. Single Problem                      2. Multiple Problems

Nature of the Solution:

1. Simple Solution                      2. Complex Solution                      3. No Viable Solution

Problem Severity:

- 1 Less severe; no urgency  
2 Moderately severe; can wait a few days  
3 Crisis; something has to be done immediately

II. NATURE OF INTERACTION WITH CLIENT: (One or more)Type of Exchange:

	<u>YES</u>	<u>NO</u>
Information Exchange	1	2
Clinical Assessment	1	2
Short-Term Counseling	1	2
Referral was made	1	2

Client's Openness:

Did client identify self?

- 1 Refused;    2 Yes, after hesitation;    3 Yes

Did client reveal demographic data?

- 1 Refused;    2 Yes, after hesitation;    3 Yes

III. INCOME:

- 1 Less than \$15,000  
2 \$15-\$25,000  
3 \$26-\$35,000  
4 \$36-\$45,000  
5 \$46-\$55,000  
6 \$56-\$65,000  
7 \$66-\$75,000  
8 More than 75,000

IV. ACCESSIBILITY TO EACH OF THE FOLLOWING (one or more)

	<u>YES</u>	<u>NO</u>
1 Accessibility of client to office (less than one hr.)	1	2
2 Office hours convenient	1	2
3 Availability of transportation; public or private	1	2
4 Regular on-site visits conducted	1	2

V. RELIANCE ON MODE OF COMMUNICATION:

A. Indicate medium used in INITIAL CONTACT

- 1 Telephone
- 2 Face-to-Face

B. For specific medium used, estimate the time spent with employee in initial contact

- 1 Less than 15 Minutes
- 2 15-30 Minutes
- 3 31-45 Minutes
- 4 46-60 Minutes
- 5 More than 1 hour

C. FOLLOW-UP CONTACTS PRIOR TO FIRST APPOINTMENT: (With employee or Family Member only)

Telephone:

AND/OR

Face-to-Face:

Estimated time spent on Follow-up:

- 1 Less than 30 Minutes
- 2 31-60 Minutes
- 3 61-90
- 4 91-120
- 5 121-150
- 6 151-180
- 7 181-210
- 8 211-240
- 9 241 & over

- 1 Less than 30 Minutes
- 2 31-60 Minutes
- 3 61-90
- 4 91-120
- 5 121-150
- 6 151-180
- 7 181-210
- 8 211-240
- 9 241 & over

D. Number of follow-up contacts prior to first appointment (With employee or family member only) (Circle One):

<u>Telephone</u>		AND/OR	<u>Face-to-Face</u>	
1	6		1	6
2	7		2	7
3	8		3	8
4	9 & over		4	9 & over
5			5	

VI. EAP RECOMMENDATIONS: (One or More)

- 1 Counseling by EAP
- 2 Self-help group
- 3 Out-patient treatment: Clinic
- 4 Out-patient treatment: Private Practice
- 5 In patient treatment
- 6 Legal: Clinic
- 7 Legal: Private
- 8 Financial
- 9 Other (pl. specify)

VII. REFERRAL INITIATION: (one only)

- 1 Client clearly asked for appointment with resource.
- 2 Client suggested referral after discussion.
- 3 Administrator suggested referral after discussion and client responded affirmatively.
- 4 Administrator raised referral and client deferred, waffled or refused.
- 5 No referral necessary.

VIII. TIME BETWEEN INITIAL CONTACT WITH P.A. AND FIRST SCHEDULED APPOINTMENT WITH RESOURCE: (Whether kept or not)

1	1 - 2 Days	6	11 - 12 Days
2	3 - 4	7	13 - 14
3	5 - 6	8	15 - 16
4	7 - 8	9	Over 16
5	9 - 10		

IX. COMPLIANCE WITH FIRST APPOINTMENT: (Circle Most Relevant One)

- 1 Missed first appointment
- 2 Cancelled first appointment and did not reschedule
- 3 Contacted referral source for information but made no appointment
- 4 Action postponed
- 5 Cancelled first appointment and rescheduled
- 6 Kept first appointment with referral source

X. COMPLIANCE WITH GENERAL RECOMMENDATIONS: (Circle most relevant one)

- 1 Did not Comply
- 2 Partially Complied with Recommendations
- 3 Fully Complied with Recommendations

XI. MAJOR REASON FOR NON-COMPLIANCE WITH FIRST APPOINTMENT: (Circle One)

- 1 Client complied with first appointment
- 2 Low credibility of recommended treatment
- 3 Recommendation not supported by significant other
- 4 Recommendation itself is anxiety-provoking
- 5 Cannot afford treatment
- 6 Unable to get spouse involved
- 7 Does not have time
- 8 Not ready yet to take action
- 9 Other: \_\_\_\_\_

XII. MAJOR REASON FOR CLOSING CASE: (Circle Most Relevant One)

- 1 Client successfully referred for treatment or relevant assistance.
- 2 Assistance provided by EAP was sufficient to address problem.
- 3 Client refused recommendations.
- 4 EAP unable to help re. client's problem.
- 5 Client left company.
- 6 Other reason for closing case.

APPENDIX C

GLOSSARY OF TERMS



## GLOSSARY OF TERMS

### I. Nature of Problems:

2. Multiple Problems - Primary plus other significant problems, if they exist, as listed on the green sheet  
 Eg: Alcoholism - Primary  
       Financial/Credit - Secondary  
       Legal/Drunk Driving - Tertiary  
       would qualify for Multiple problems

### Nature of Solution:

1. Simple Solution - One-to-one relationship between one problem and one appropriate response
2. Complex Solution - Several issues have to be addressed in order to adequately respond to the problem
3. No Viable Solution - We can't suggest any response which will make the problem disappear

### Problem Severity

Severity is measured in terms of time demands and urgency. The problem has to be attended to right away or, alternatively, it can wait awhile.

### II. Type of Exchange:

- Information Exchange - was the client simply asking for information to facilitate his own solution? Eg: Guidelines to qualify for a student loan or other federal program.
- Clinical Assessment - Was it necessary for you to explore to determine extent of problem and level of care necessary?
- Short Term Counseling - Did you agree to see or talk with the client for a limited number of sessions beyond assessment?

### IV Accessibility to Each of the Following:

1. Accessibility of client to office - Measured in terms of travel time; can the client get to the office in less than one hour?
2. Office hours convenient - Can the person take time during the work day or are accommodations made for the individual to be seen during off-hours?

3. Availability of Transportation - Does the client have a car or access to reasonable public transportation?
  4. Regular on-site visits conducted - Does a P.A. visit the Company on a fairly regular schedule?
- In the event that the caller is from out-of-state, NO would be the appropriate responses to most of the 4 questions, with number 4 perhaps being YES.

#### V Initial Contact:

Almost all contacts will be made first by telephone, if only to set up appointments. Therefore, initial contact will be defined as the one where the assessment takes place whether by phone or in person. The time spent in follow-up as measured here is only time spent with the caller (employee or family members). The green sheet will have recorded the total time spent on resources, etc.

#### VIII Time Between Initial Contact and First Appointment with Resource:

The time in question here is the number of days between the client's entry into the program and a fixed appointment with a resource, not necessarily an appointment he or she keeps.

Compliance: This item is meant to be more inclusive than the item regarding compliance with first appointments only. Your assessment of compliance level here may take into consideration the recommendation of the resource and the client's beginning response to it. If, for instance, you recommend in-patient treatment and the client opts for out-patient treatment, you may want to consider other factors, you might be aware of (eg. person can't get medical leave, single parent with young child, etc.) which may lead you to interpret their response to your recommendation. You may feel that the issue is legitimate and the individual is responding to your recommendation for treatment, (therefore, fully complying), or the excuse is lame and an attempt to only partially comply. Obviously, I can't cover every contingency which may contribute to your overall judgment, but your subjective judgment will be called into play here.

APPENDIX D

LETTER TO PROGRAM ADMINISTRATORS

10 HRG Staff

From Linda Brown <sup>112</sup>

As many of you may know, I have been trying to complete the last phase of my Ph.D. requirements, and am now ready to start on my dissertation research. As it happens, my topic meshes perfectly with Pete's goal of doing studies with our own rich data bank. However, there are several rather interesting pieces of information which we do not now collect and which could prove useful in our own business development.

I am proposing that we look at the issue of Compliance, i.e., whether clients actually follow our recommendations. This will be measured in very concrete terms: Do they keep the first appointment with the recommended resource? The assumption here is that they've begun the process - we make no claims about further outcome. I also am proposing that we keep track of the medium of communication—telephone or face-to-face encounters. It is possible that the relative effectiveness of each medium depends on the demographic characteristics of the client or on other situational factors.

In order to collect this information, however, I need to ask for the cooperation of all HRG program administrators in filling out the green sheets very carefully and also the additional questionnaire. With each P.A. agreeing to fill in 25 questionnaires (more if you can!), with roughly half of them for face-to-face encounters and the other half for telephone encounters, we should generate enough data to say something about this process.

I would like to suggest that we start collecting this information as soon as possible, i.e., the next 25 cases in both media. The questionnaires should be filled in as soon as you have enough information to do so and not necessarily when you no longer are dealing with the client. You may find it difficult to determine just when some of the more nebulous cases should be completed—when clients fail to return calls, for instance—I would suggest that no later than one month from the time of the initial contact is sufficient. With each questionnaire, it will be necessary for you to xerox only the first green sheet and attach it.

As you complete each case, could you please mail both the questionnaire and the xeroxed first page of the green sheets to me at the above address. I would like to receive at least the first ten no later than the end of February, the next ten no later than the end of March and the last five no later than the middle of April. In order for me to code the data, do the statistical analysis and write it up in time, keeping to this timetable is critical.

If you have any questions, please call me

Thank you all for your cooperation.

Linda

APPENDIX E

RATINGS OF PROGRAM ADMINISTRATORS (COUNSELORS)

## APPENDIX E

## RATINGS OF PROGRAM ADMINISTRATORS (COUNSELORS)

1 2 3 4 5 6 7 8 9

Genuineness

1 2 3 4 5 6 7 8 9

Trustworthiness

1 2 3 4 5 6 7 8 9

Expertise

1 2 3 4 5 6 7 8 9

Empathy

APPENDIX F

ABBREVIATIONS USED IN TABLES

## ABBREVIATIONS USED IN TABLES

LEVEL = Job level  
MARISTAT = Marital status  
LENGTSER = Length of service  
AFJOBPER = Affect: Job performance  
WAYATTEN = Attendance  
WAYQUALI = Work quality  
WAYQUANT = Work quantity  
WAYRELAT = Work relationships  
WAYATTIT = Work attitude  
COEAPBEE = Contacted EAP before  
NATUPROB = Single vs. multiple problems  
NATUSOLU = Complexity of solution  
PROBSEVE = Problem severity  
INFOEX = Information exchange  
CLINIASS = Clinical assessment  
SHORTE = Short term counseling  
REFERMO = Referral made  
OPENSELE = Did client identify self?  
OPENDEMO = Did client reveal demographic data?  
ACCTOFE = Accessibility to EAP office  
OPFHRCON = Office hours convenient  
AVATRANS = Availability of transportation  
ONSITEVI = Conducts on-site visits  
MODINC = Telephone vs. face-to-face: Usage  
TIMSPINC = Time spent in initial contact  
PHOMEMIN = Time in follow-up: Telephone  
FACEMIN = Time in follow-up: Face-to-face  
NTELFUBI = Number of follow-ups: Telephone  
NFACEFUBI = Number of follow-ups: Face-to-face  
EAPRECOM = EAP treatment recommendations  
REFERINI = Referral initiation: Who asked for appointment?  
TICPAFSA = Waiting time: Appointment with resource  
COMLPST = Compliance: First appointment  
COMPLGEN = Compliance: Overall



APPENDIX G

PROBLEM CODES

## - PROBLEM CODES

Psychological (00-19)

Suicidal	00
Psychosis	01
Anxiety	02
Depression	03
Phobia	04
Behavioral	05
Sexual	06
Adjustment	07
Eating Disorder	08
Child Conflict	09

Legal (20-29)

Property	20
Credit	21
Divorce/Separation	22
Custody/Child Support	23
Housing	24
Felony/Misdemeanor	25
Discrimination EEOC	26
Consumer	27
Financial	28
Anti-Social	29

Financial (30-39)

Budget	30
Credit	31
Garnishee	32
Loans	33
Insurance	34
Consumer	35
Counseling	36
Counseling Re: Debts	37

Addiction (40-49)

Alcoholism	40
Rx Drugs	41
Marijuana	42
Street Drugs	43
Poly Abuse	44
Weight	45
Smoking	46
Gambling	47

Social Welfare (50-69)

Immigration	50
Housing	51
Adoption	52
Social Benefits	53
Child Care	54
Elderly Care	55
Educational	56
Vocational	57
Medical	58

Anti-Social (70-79)

Abuse	70
Runaway	71
Rape	72
Robbery/Assault	73
Missing Person	74
<u>Marital</u>	80
<u>Job-Related</u>	90

APPENDIX H

FREQUENCY AND PERCENT: SAMPLE CHARACTERISTICS OF TOTAL SAMPLE

Table H-1

Frequency and Percent by Job Level

	<u>n</u>	Percent
Union	79	18.5
Salaried	277	64.9
Manager	53	12.4
Executive	18	4.2
Total	427	100

Table H-2

Frequency and Percent by Income

	<u>n</u>	Percent
Less than \$15,000	62	14.2
\$15-\$25,000	190	43.6
\$26-\$35,000	99	22.7
\$36-\$45,000	35	8.0
\$46-\$55,000	17	3.9
\$56-\$65,000	16	3.7
\$66-\$75,000	5	1.1
More than \$75,000	12	2.8
Total	436	100

Table H-3

Frequency and Percent by Marital Status

	<u>n</u>	Percent
Single	68	19.1
Married	216	60.5
Separated	28	7.8
Divorced	36	10.1
Widowed	6	1.7
Partnership	<u>3</u>	<u>0.8</u>
Total	357	100

Table H-4

Frequency and Percent: Contacted BAP Before

	<u>n</u>	Percent
Yes	76	17.6
No	<u>357</u>	<u>82.4</u>
Total	433	100

Table H-5

Frequency and Percent by Mode of Initial Contact

	<u>n</u>	Percent
Telephone	349	77.6
Face-to-face	<u>101</u>	<u>22.4</u>
Total	450	100

Table H-6

Frequency and Percent by Referral Initiation

	<u>n</u>	Percent
Client asked for appointment	106	23.7
Client asked after discussion	17	3.8
Administrator suggested referral after discussion	221	49.3
Administrator suggested, client deferred	69	15.4
No referral necessary	<u>35</u>	<u>7.8</u>
Total	448	100

Table H-7  
Frequency and Percent by Information Exchange

	<u>n</u>	<u>Percent</u>
Yes	360	82.2
No	<u>78</u>	<u>17.8</u>
Total	438	100

Table H-8

Frequency and Percent by Clinical Assessment

	<u>n</u>	<u>Percent</u>
Yes	272	63.6
No	<u>156</u>	<u>36.4</u>
Total	428	100

Table H-9

Frequency and Percent by Short-Term Counselling

	<u>n</u>	<u>Percent</u>
Yes	156	38.0
No	<u>255</u>	<u>62</u>
Total	411	100

Table H-10

Frequency and Percent by Referral was Made

	<u>n</u>	<u>Percent</u>
Yes	377	85.1
No	<u>66</u>	<u>14.9</u>
Total	443	100



Table H-11

Frequency and Percent by Client Openness to Identify Self

	<u>n</u>	Percent
Refused	10	2.2
Yes after hesitation	39	<u>8.7</u>
Yes	<u>400</u>	<u>89.1</u>
Total	449	100

Table H-12

Frequency and Percent by Client Openness in Revealing DemographicData

	<u>n</u>	Percent
Refused	8	1.8
Yes after hesitation	50	11.1
Yes	<u>391</u>	<u>87.1</u>
Total	449	100

Table H-13

Frequency and Percent by Accessibility to EAP Office

	<u>n</u>	Percent
Yes	300	66.8
No	<u>149</u>	<u>33.2</u>
Total	446	100

Table H-14

Frequency and Percent by Availability of Transportation

	<u>n</u>	Percent
Yes	308	69.2
No	<u>137</u>	<u>30.8</u>
Total	445	100

Table H-15

Frequency and Percent by Office Hours Convenient to Client

	<u>n</u>	Percent
Yes	321	72
No	<u>125</u>	<u>28</u>
Total	446	100

Table H-16

Frequency and Percent by On-Site Visit

	<u>n</u>	Percent
Yes	56	12.8
No	<u>382</u>	<u>87.2</u>
Total	438	100

Table H-17

Frequency and Percent of Use of Media by Job Level

Job level	Telephone		Face-to-face	
	<u>n</u>	Percent	<u>n</u>	Percent
Union	57	81.4	13	18.6
Salaried	167	73.2	61	26.8
Manager	44	89.8	5	10.2
Executive	11	68.8	5	31.2

Table H-18

Frequency and Percent of Use of Media by Marital Status

Marital status	Telephone		Face-to-face	
	<u>n</u>	Percent	<u>n</u>	Percent
Single	53	70.7	22	29.3
Married	183	77.9	52	22.1
Separated	23	74.2	8	25.8
Divorced	31	86.1	5	13.9

Table H-19

Frequency and Percent of Use of Media by Referral Source

Referral source	Telephone		Face-to-face	
	<u>n</u>	Percent	<u>n</u>	Percent
Voluntary	248	84.4	46	15.6
Non-voluntary	42	49.4	43	50.6

Table H-20

Frequency and Percent of Use of Media by Referral Initiation

Referral source	Telephone		Face-to-face	
	<u>n</u>	Percent	<u>n</u>	Percent
Client asked for appointment	86	90.5	9	9.5
Client asked after discussion	13	92.9	1	7.1
Administrator suggested after discussion	149	74.1	52	25.9
Administrator suggested, client deferred	33	57.9	24	42.1
No referral	10	90.9	1	9.1

Table H-21

Frequency and Percent by Compliance: Overall

	<u>n</u>	Percent
Did not comply	90	20.3
Partially complied	90	20.3
Fully complied	<u>264</u>	<u>59.4</u>
Total	444	100

Table H-22

Frequency and Percent by Compliance with First Appointment

	<u>n</u>	Percent
Missed first appointment	11	2.7
Cancelled and did not reschedule	19	4.7
Contacted referral source but made no appointment	29	7.1
Action postponed	7	1.7
Cancelled first appointment and rescheduled	79	19.5
Kept first appointment	<u>261</u>	<u>64.3</u>
Total	406	100

Table H-23  
Compliance (overall) by Sex

Sex	Total N	Did not comply		Partial compliance		Full compliance	
		<u>n</u>	Percent	<u>n</u>	Percent	<u>n</u>	Percent
Male	216	37	17.1	44	20.4	135	62.5
Female	206	47	22.8	45	21.8	114	55.3

Table H-24

Frequency and Percent by Reason for Non-Compliance

	<u>n</u>	Percent
Complied with first appointment	258	58.8
Low credibility	7	1.6
Not supported by significant other	7	1.6
Anxiety provoking	17	3.9
Cannot afford treatment	11	2.5
Spouse not involved	6	1.4
Does not have time	66	15.0
Others	<u>54</u>	<u>12.3</u>
Total	439	100

Table H-25

Frequency and Percent by Reason for Closing Case

	<u>n</u>	Percent
Successfully referred	222	54.8
Assistance provided by EAP was sufficient	58	14.3
Client refused recommendations	65	16.0
EAP unable to help	15	3.7
Client left company	7	1.7
Cannot reach employee	30	7.4
Client has his/her own resources	3	0.7
Client postponed action	1	0.2
Other reasons	<u>4</u>	<u>0.9</u>
Total	405	99.7



Table H-26

Frequency and Percent by EAP Recommendation

	<u>n</u>	<u>Percent</u>
Counseling by EAP	25	7.3
Self-help group	47	13.7
Outpatient-clinic	37	10.8
Outpatient-private	97	28.4
Inpatient	51	14.9
Legal-clinic	5	1.5
Legal-private	23	6.7
Financial	25	7.3
Other	<u>32</u>	<u>9.4</u>
Total	342	100

APPENDIX I

DISCRIMINANT ANALYSIS: MODE OF INITIAL CONTACT

Table I-1

Discriminant Analysis: Mode of Initial Contact: Telephone vs.  
Face-to-Face

Independent variable	<u>Structure correlation</u>
	Function 1
Problem severity	-.24
Office hours convenient <sup>a</sup>	.22
Availability of transportation <sup>a</sup>	.28
Time spent in initial contact	-.72

Note. Structure correlation refers to the correlation of each independent variable with the function. Correlations are significant at least at  $p < .05$ .  $N = 305$ . a = reverse scoring.

	<u>Group centroid</u>
	Function
Telephone	.45
Face-to-face	1.88
Canonical correlation:	.68
Percent of variance:	100%
$\chi^2$ :	149.83**
<u>df</u> :	9

\*\* $p < .001$

Table I-2

Discriminant Analysis: Classification into Mode of InitialContact: Telephone vs. Face-to-Face Groups

Actual group	n	Predicted group membership	
		1	2
Telephone	238	228 95.8%	10 4.2%
Face-to-face	67	16 23.9%	51 76.1%

Percent of grouped cases correctly classified: 91.5%

APPENDIX J

DISCRIMINANT ANALYSIS: JOB LEVEL

Table J-1

Discriminant Analysis: Job Level

Independent variable	<u>Structure Correlation</u>		
	Function 1	Function 2	Function 3
Sex	+	-.34	-.48
Length of service	.23	.50	.08
Age	.14	.21	+
Attendance <sup>a</sup>	+	-.17	.36
Work quantity <sup>a</sup>	+	+	.30
Work relationships <sup>a</sup>	+	+	.21
Information exchange <sup>a</sup>	+	+	.32
Referral made <sup>a</sup>	+	-.12	-.20
Did client identify self?	+	.28	-.07
Income	.83	+	-.19
Accessibility to EAP offices <sup>a</sup>	.11	.49	.15
Office hours convenient <sup>a</sup>	.14	.16	.29
Availability of transportation <sup>a</sup>	.13	.36	.20
Time spent in initial contact	.24	+	-.16
Time in follow-up: telephone	.15	.35	.28
Number of follow-ups: telephone	.09	.24	-.09
Compliance: overall	+	+	.37
Compliance: first appointment	+	.07	.26

Note. Structure correlation refers to the correlation of each independent variable with the function. Correlations are significant at least at  $p < .05$ . + indicates a nonsignificant correlation.  $N = 276$ . <sup>a</sup> = reverse scoring.

Independent variable	n	<u>Group centroid</u>		
		Function 1	Function 2	Function 3
Union	62	-.23	.90	-.11
Salaried	176	-.35	-.33	-.06
Manager	25	1.04	.04	1.00
Executive	13	3.49	-.16	-.71
Canonical correlation:		.67	.45	.34
Percent of variance:		67.31%	21.89%	10.81%
X <sup>2</sup> :		220.75**	82.63**	28.35*
df:		51	32	15

\* $p < .05$

\*\* $p < .001$

Table J-2

Discriminant Analysis: Classification into Job Level

Actual group	n	<u>Predicted group membership</u>			
		1	2	3	4
Union	62	23	37	2	0
		37.1%	59.7%	3.2%	0.0%
Salaried	172	6	166	4	0
		3.4%	94.3%	2.3%	0.0%
Manager	25	3	12	7	3
		12.0%	48.0%	28.0%	12.0%
Executive	13	0	4	0	0
		0.0%	100.0%	0.0%	0.0%

Percent of grouped cases correctly classified: 74.3%

APPENDIX K

DISCRIMINANT ANALYSIS: REFERRAL SOURCE



Table K-1

Discriminant Analysis: Referral Source

Independent variable	Structure Correlation	
	Function 1	Function 2
Sex	-.20	.23
Length of service	.17	-.44
Affect: Job performance	.56	+
Attendance <sup>a</sup>	-.46	.10
Work quality <sup>a</sup>	-.32	.32
Work quantity <sup>a</sup>	-.35	.15
Work relationships <sup>a</sup>	-.32	+
Work attitudes <sup>a</sup>	-.15	.20
Single vs. multiple problems	.21	.14
Problem severity	.25	.15
Clinical assessment <sup>a</sup>	-.21	+
Did client reveal demographic data?	+	.31
Telephone vs. face-to-face: Usage	.41	.28
Time spent in initial contact	.13	.43
Time in follow-up: Telephone	.09	.33

Note. Referral sources include: voluntary, suggested, urged, and firm. Structure correlation refers to the correlation of each independent variable with the function. Correlations are significant at least at  $p < .05$ .  $N = 323$ . a = reverse scoring. + indicates a nonsignificant correlation.

Group	n	Group centroid	
		Function 1	Function 2
Voluntary	264	-.39	-.04
Suggested	19	1.08	1.61
Urged	9	2.29	-1.06
Firm	31	2.39	-.10
Canonical correlation:		.68	.38
Percent of variance:		77%	15%
$\chi^2$ :		199.92**	54.95*
df:		60	38

\* $p < .05$

\*\* $p < .001$

Table K-2

Discriminant Analysis: Classification into Referral Source Groups

Actual group	n	<u>Predicted group membership</u>			
		1	2	3	4
Voluntary	264	249	4	1	10
		94.3%	1.5%	0.4%	3.8%
Suggested	19	11	3	0	5
		57.9%	15.8%	0.0%	26.3%
Urged	9	3	0	4	2
		33.3%	0.0%	44.4%	22.2%
Firm	31	9	3	0	19
		29.0%	9.7%	0.0%	61.3%

Percent of grouped cases correctly classified: 85.1%

APPENDIX L

DISCRIMINANT ANALYSIS: EAP RECOMMENDATIONS

Table L-1

Discriminant Analysis: EAP Recommendations: Outpatient-Clinic,  
Outpatient-Private and Inpatient Treatment

Independent variable	Structure Correlation	
	Function 1	Function 2
Length of service	.33	+
Age	.31	+
Affect: Job performance	.16	.22
Work quantity <sup>a</sup>	-.22	+
Problem severity	.46	.11
Clinical assessment <sup>a</sup>	.24	.22
Short-term counseling <sup>a</sup>	.33	+
Did client identify self?	+	-.24
Did client reveal demographic data?	.10	-.26
Income	+	.47
Time in follow-up: Telephone	.32	.09
Waiting time: Appointment with resource	-.13	.28
Compliance: Overall	.10	-.38
Compliance: First appointment	.08	-.44

Note. Structure correlation refers to the correlation of each independent variable with the function. Correlations are significant at least at  $p < .05$ .  $N = 122$ . <sup>a</sup> = reverse scoring. + indicates a nonsignificant correlation.

Group	n	Group centroid	
		Function 1	Function 2
Outpatient-clinic	26	-.74	-.84
Outpatient-private	61	-.45	.40
Inpatient treatment	35	1.41	-.10
Canonical correlations:		.66	.44
Percent of variance:		77%	23%
$\chi^2$ :		76.82**	20.68*
df:		24	11

\* $p < .05$

\*\* $p < .001$

Table L-2

Discriminant Analysis: Classification into EAP Recommendation Groups

Actual group	n	<u>Predicted group membership</u>		
		1	2	3
Outpatient-clinic	26	12	12	2
		46.2%	46.2%	7.7%
Outpatient-private	61	5	51	5
		8.2%	83.6%	8.2%
Inpatient treatment	35	2	9	24
		5.7%	25.7%	68.6%

Percent of grouped cases correctly classified: 71.3%

APPENDIX M

INTERCORRELATIONS OF VARIABLES

Table M

## Intercorrelations of Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SEX	1	.03	-.22	-.03	.07	.08	.04	-.02	-.05	.00	-.02	.06	.01	.08	.01	-.00	-.10	-.02	-.05	-.12	.00	-.05	-.06
LEVEL		1	.11	.00	-.06	-.02	-.07	.14	.11	.12	-.05	-.00	.02	.06	-.01	.03	.05	.13	.09	-.07	-.11	.08	.16
LENGTSE			1	.07	-.05	-.07	-.06	.03	.08	.04	-.11	-.06	-.06	-.03	.07	.08	.03	-.02	.05	.09	-.06	.06	.06
AFJOBPER				1	-.43	-.52	-.47	.41	.27	.28	.06	-.26	-.20	.07	.09	-.20	.13	.04	.02	.06	.11	-.06	.11
WAYATTEN*					1	.38	.28	.03	-.12	-.25	.04	.25	.04	.07	.12	.24	.24	.11	-.04	-.02	.06	-.12	.18
WAYQUANT*						1	.45	-.12	-.17	-.20	-.07	.17	.09	.00	.04	.05	.00	.05	.03	.00	.08	.00	.01
WAYRELAT*							1	-.06	-.07	-.17	-.03	.25	.10	.03	.03	.00	-.02	.00	-.01	-.07	.06	.03	.05
NATUPROB								1	.49	.18	-.04	-.09	-.26	.09	-.15	-.23	.17	.13	.15	.09	.04	-.11	.24
NATSOLU									1	.29	-.10	-.34	-.23	.04	-.07	-.07	-.04	-.09	.17	.13	.00	.01	.09
PROBSEV										1	.10	-.34	-.06	-.10	-.03	.01	-.05	.00	.17	.12	-.03	.15	.02
INFOEX*											1	-.14	.10	.06	-.01	-.03	.06	.08	-.04	.03	.02	.00	-.01
CLINIASS*												1	.22	.12	.10	.14	.19	.14	.07	.07	.05	-.14	.07
SHORTE*													1	-.11	.02	.07	.00	.05	-.11	-.08	-.06	.15	.05
REFERNO*														1	-.13	-.10	.15	.15	-.12	-.12	-.15	-.19	.05
OPENSELF															1	.69	-.24	-.21	.05	.03	-.04	.22	.01
OPENDMO																1	-.34	-.20	.07	.03	.02	.24	.16
ACCTOFE																	1	.62	.03	.02	-.06	-.12	.24
OFFHRCN*																		1	-.07	-.03	.02	-.01	.18
PHONEMIN																			1	.63	.20	.05	.06
NTFLFUBI																				1	.26	-.04	.00
TICPAFSA																					1	.04	.02
COMLFT																						1	.33
COMPLGEN																							1

\*Reverse scoring

Note. See Appendix F for full description of each variable. (N = 448)

APPENDIX N

MEANS AND STANDARD DEVIATIONS FOR JOB LEVEL ON SELECTED VARIABLES



Table N  
Mean and Standard Deviations for Job Level on Selected Variables

		Variable											
		SEX			LENGTSES			AGE			WAYATTEN*		
		n	M	SD	n	M	SD	n	M	SD	n	M	SD
Job level													
Union		57	1.35	.48	5.51	2.46	39.21	11.63	1.70	.46	1.63	.49	.48
Salaried		155	1.57	.50	4.08	2.13	36.75	10.04	1.79	.41	1.65	.48	.38
Manager		54	1.21	.41	5.42	2.39	43.00	10.98	1.92	.28	1.83	.38	.49
Executive		12	1.67	1.23	6.17	2.44	45.50	9.89	1.67	.49	1.67	.49	
		WAYRELAT*			INFOEX*			REFERMO*			OPENSELF		
		n	M	SD	n	M	SD	n	M	SD	n	M	SD
Job level													
Union		57	1.72	.45	1.14	.35	1.05	.23	2.98	.13	2.40	1.16	.92
Salaried		155	1.74	.44	1.17	.38	1.10	.30	2.87	.36	2.39	2.08	2.27
Manager		54	1.83	.38	1.29	.46	1.13	.34	2.92	.41	4.00	2.08	
Executive		12	1.67	.49	1.08	.29	1.00	.0	2.83	.39	6.08	2.27	

Table continues ...

Table N continued

Job level	n	Variable									
		ACCTOFE*		OFFHRCON*		AVATRANS*		TIMSPINC		PHOMEMIN	
		M	SD	M	SD	M	SD	M	SD	M	SD
Union	57	1.51	.50	1.33	.48	1.42	.50	2.42	1.02	2.49	2.30
Salaried	155	1.23	.42	1.25	.43	1.22	.42	2.48	1.09	1.72	1.27
Manager	54	1.46	.51	1.50	.51	1.46	.51	2.63	1.13	1.83	1.74
Executive	12	1.42	.51	1.42	.51	1.42	.51	3.58	1.44	3.08	2.71

Job level	n	NTELFUBI		COMPLGEN		COMLFST	
		M	SD	M	SD	M	SD
Union	57	3.11	2.74	2.54	.76	5.16	1.46
Salaried	155	2.58	2.14	2.56	.77	5.23	1.29
Manager	54	2.58	2.36	2.88	.85	5.50	1.25
Executive	12	3.58	3.26	2.42	.79	5.42	.90

\*Higher mean indicates reversed direction

Note. See Appendix F for full description of each variable.

APPENDIX O

MEDIA TABLES

Table 0-1

Time Spent in Initial Contact

Predictors	Beta	F	Overall	
			$R^2$	F
Sex	-.05	.25		
Job level	.12	5.13*		
Affect: Job Performance	.12	6.24**		
Contacted EAP before	.27	4.23*		
Problem severity	.28	12.40***		
Clinical assessment	-.49	17.59***		
Short term counseling	-.36	10.50***		
			.22	15.11***

\*  $p < .05$ \*\*  $p < .01$ \*\*\*  $p < .001$

Table 0-2

Initial Contact by Media: Means and Standard Deviations\*

	Telephone (N = 247)			Face-to-face (N = 80)	
	<u>M</u>	<u>SD</u>		<u>M</u>	<u>SD</u>
Sex	1.50	.52		1.48	.62
Job level	2.12	.95		2.20	1.06
Length of service	4.54	2.31		4.71	2.31
Affect: Job performance <sup>a</sup>	2.52	1.17		3.10	1.19
Contacted EAP before <sup>a</sup>	1.85	.53		1.81	.47
Single vs. multiple problems	1.42	.51		1.52	.85
Complexity of solution	1.56	.50		1.63	.51
Problem severity	1.96	.72		2.19	.67
Information exchange <sup>a</sup>	1.17	.38		1.36	.42
Clinical assessment <sup>a</sup>	1.45	.50		1.15	.41
Short term counseling <sup>a</sup>	1.64	.48		1.63	.49
Referral made <sup>a</sup>	1.13	.33		1.13	.34
Did client identify self?	2.83	.44		2.97	.18
Did client reveal demographic data?	2.81	.48		2.89	.41
Income	2.79	1.49		2.75	1.70
Access to office <sup>a</sup>	1.41	.50		1.11	.38
Office hours convenient <sup>a</sup>	1.33	.47		1.09	.29
Availability of transportation	1.36	.48		1.09	.29
Conducts on-site visits <sup>a</sup>	1.92	.27		1.75	.43
Time spent in initial contact	2.33	.89		3.78	1.03

Time in follow-up: Telephone	1.94	1.55	1.75	1.65
Number of follow-ups: Telephone	2.69	2.30	2.33	2.31
Number of follow-ups: Face-to-face	.06	.39	.17	.44

\*Note. The interpretation of the means is complicated by the use of categorical scoring necessary for some of the statistical analyses. For instance, the coding designation for Sex was such that Male = 1, and Female = 2. Note also, that a = reverse scoring. Please see Appendix B for additional interpretation of the coding systems.

Table 0-3

Regression of Compliance on Predictors by Media (Beta Weight)

	Compliance: first appointment		Compliance: overall	
	Telephone		Face-to-face	
	(N = 247)	(N = 80)	(N = 247)	(N = 80)
	B	B	B	B
Sex	-.22	-.23	.02	-.13
Job level	.20*	.12	.12**	.12
Length of service	.01	.01	.02	.00
Affect: Job performance	-.14	.03	-.06	.17
Attendance	.21	-.53	.14	-.16
Work quality <sup>a</sup>	-.30	-.59	-.12	-.54
Work quantity <sup>a</sup>	-.18	.85**	-.13	.81**
Work relationships <sup>a</sup>	.41	.48	.14	.44*
Work attitude <sup>a</sup>	-.37*	-.09	-.09	.00
Contacted EAP before <sup>a</sup>	-.66**	-.11	-.08	.02
Single vs. multiple problems	-.47*	-.14	-.01	.28
Complexity of solution	.38	.44	-.05	-.07
Problem severity	.09	.46**	.08	.20
Information exchange <sup>a</sup>	.22	-.14	-.07	-.24
Clinical assessment <sup>a</sup>	-.26	.93**	-.06	.89**
Short term counseling <sup>a</sup>	-.35*	.25	-.16	.10
Referral made <sup>a</sup>	-.57**	-.11**	.08	-.53*
Did client identify self?	.43	.64	.31*	-.37
Income	-.09	.02	-.03	.06
Accessibility to EAP office <sup>a</sup>	-.36	-.53	-.20	-.69
Office hours convenient <sup>a</sup>	.41*	.48	.07	.50
Waiting time: Appointment with resource	.02	-.09*	.01	-.04

Table continues

Table 0-3 continued

	Compliance: first appointment		Compliance: overall	
	Telephone (N = 247)	Face-to-face (N = 80)	Telephone (N = 247)	Face-to-face <sup>b</sup> (N = 80)
R <sup>2</sup>	15% F= 1.77* < .05	46% F=2.06** < .01	11% F=1.29*	52% F=2.68*** < .001

Note. <sup>a</sup> = reverse scoring

\*p < .05

\*\*p < .01

\*\*\*p < .001



Table 0-4

Prediction of Telephone Follow-up: Time

Predictors	Beta	F	R <sup>2</sup>	Overall F
Sex	-.12	.75		
Job level	.20	6.92**		
Work attitude	.37	6.08**		
Simple vs. complex solution	.41	7.23**		
Problem severity	.30	7.69**		
Accessibility to office	.64	9.73***		
Office hours convenient	-.53	6.23**		
Waiting time	.15	23.56***		
			.14	7.44***

\*\*  $p < .01$ \*\*\*  $p < .001$

Table 0-5

Prediction of Telephone Follow-up: Number

Predictors	Beta	<u>F</u>	<u>R</u> <sup>2</sup>	Overall <u>F</u>
Sex	* -.36	3.50		
Level	-.16	2.04		
Problem severity	.34	4.53*		
Complexity of solution	.47	4.50*		
Waiting time	.26	35.07***		
			.12	10.82***

\*  $p < .05$ \*\*\*  $p < .001$

APPENDIX P

COMPLIANCE TABLES

Table P-1

Frequency and Percent of Compliance by Problem Type

Problem Type	Total N	Did Not Comply		Partial Compliance		Full Compliance	
		n	Percent	n	Percent	n	Percent
Psychological	127	27	21.3	25	19.7	75	59.1
Legal	57	7	12.3	10	17.5	40	70.2
Financial	32	8	25.0	8	25.0	16	50.0
Addiction	93	15	16.1	19	20.4	59	63.4
Social Welfare	31	6	19.4	4	12.9	21	67.7
Marital	38	9	23.7	7	18.4	22	57.9
Job-related	26	6	23.1	7	26.9	13	50.0

Table P-2

## Frequency of Compliance by Job Level and Problem Type

	Job level					
	Union			Salaried		
	Did not comply	Partially complied	Fully complied	Did not comply	Partially complied	Fully complied
Psychological	4	2	13	19	19	47
Legal	0	3	5	8	6	32
Financial	3	1	6	6	7	8
Addiction	5	3	13	9	12	21
Social welfare	1	1	2	4	2	14
Marital	1	0	4	6	6	14
Job-related	3	2	0	1	6	10
	17	12	43	53	58	146

Table continues

Table P-2 continued

	Job level					
	Manager			Executive		
	Did not comply	Partially complied	Fully complied	Did not comply	Partially complied	Fully complied
Psychological	3	3	12	1	1	3
Legal	0	1	1	0	0	1
Financial	0	1	2	0	0	0
Addiction	1	1	12	0	3	4
Social welfare	1	1	3	1	0	1
Marital	1	0	3	0	0	1
Job related	1	2	1	0	0	1
	7	9	34	2	4	11

Table P-3

Compliance (overall) by Job Level

Marital Status	Total <u>N</u>	Compliance					
		Did not comply <u>n</u>	Percent	Partial <u>n</u>	compliance Percent	Full compliance <u>n</u>	Percent
Single	91	15	16.5	29	31.9	47	51.6
Married	263	61	21.2	41	15.6	161	61.2
Separated	30	3	10.0	10	33.3	17	56.7
Divorced	40	4	10.0	8	20.0	28	70.0
Widowed	6	2	33.3	1	16.7	3	50.0
Partnership	3	1	33.3	1	33.3	1	33.3

Compliance (overall) by Referral Source

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Table P-5

Compliance (overall) by EAP Recommendations

	Total N	Compliance			
		Did not comply		Fully complied	
EAP recommendations		n	Percent	n	Percent
Counseling by EAP	24	2	.08	8	33.3
Self-help group	47	7	14.9	16	34.0
Out-patient treatment: clinic	37	7	18.9	4	10.8
Out-patient treatment: private practice	82	21	26.6	14	17.1
In-patient treatment	48	6	12.5	2	4.0
Legal: clinic	5	0	.0	1	20.0
Legal: private	23	6	26.1	4	17.4
Financial	22	6	27.3	3	13.6
Other	32	6	18.8	5	15.6

Table P-6

Predictors of Compliance

Compliance: First Appointment				
Predictors	Beta	<u>F</u>	<u>R</u> <sup>2</sup>	Overall <u>F</u>
Sex	-.11	.58		
Job level	.15	3.77*		
Contacted EAP before	-.37	4.03*		
Problem severity	.19	3.36*		
Referral made	-.60	7.28**		
Openself	.60	8.62**		
			.09	5.09***

\*  $p < .05$ \*\*  $p < .01$ \*\*\*  $p < .001$

Table P-7

Predictors of Compliance

Compliance overall				
Predictors	Beta	<u>F</u>	<u>R</u> <sup>2</sup>	Overall <u>F</u>
Sex	-.01	.02		
Job level	.09	4.31*		
Single vs. multiple				
problem	.20	7.51**		
Openself	.37	10.09**		
Accessibility to EAP				
office	.21	5.67*		
			.08	5.51***

\*  $p < .05$ \*\*  $p < .01$ \*\*\*  $p < .001$

APPENDIX Q

RESULTS OF CANONICAL ANALYSIS

Table Q  
Results of Canonical Analysis

Independent variable	Canonical variates	Structure Correlations		
		1	2	3
Sex		+	+	-.23
Job level		+	.52	+
Affect: Job performance		.36	+	+
Attendance <sup>a</sup>		-.26	+	+
Work quality <sup>a</sup>		-.25	+	+
Work quantity <sup>a</sup>		-.21	+	+
Work relationships <sup>a</sup>		-.31	+	+
Contacted EAP before <sup>a</sup>		+	+	-.23
Single vs. multiple problems		+	-.50	-.23
Complexity of solution		.23	.40	+
Problem severity		.48	.29	.26
Information exchange <sup>a</sup>		+	-.23	+
Clinical assessment <sup>a</sup>		-.54	+	+
Short-term counseling <sup>a</sup>		-.30	+	+
Referral made <sup>a</sup>		+	+	-.45
Did client identify self?		+	+	.30
Did client reveal demographic data?		+	+	.25
Income		.21	.22	+
Accessibility to EAP offices <sup>a</sup>		+	.33	+
Conducts on-site visits <sup>a</sup>		.29	.21	.25
Telephone vs. face-to-face: Usage		.78	+	+
Dependent variable				
Time spent in initial contact		.99	+	+
Time in follow-up: Telephone		.69	+	.26
Number of follow-ups: Telephone		+	+	.50
Waiting time: Appointment with resource		+	-.29	.30
Compliance: First appointment		.20	+	.77
Compliance: Overall		+	.56	.25
		1	2	3
Canonical correlations:		.68	.47	.39
Percent of variance:		47%	22%	15%
F:		2.84**	1.74**	1.39*
df:		162	130	100

Note. Structure correlation refers to the correlation of each variable with its variate. Correlations are significant at least at  $p < .05$ . + indicates a nonsignificant correlation.  
a= reverse scoring. N = 349

\* $p < .01$   
\*\* $p < .001$

APPENDIX R

MEANS AND STANDARD DEVIATIONS FOR REGIONS ON SELECTED VARIABLES

Table R

## Means and Standard Deviations for Regions on Selected Variables

Regions	n	LEVEL		WAYQUALI <sup>a</sup>		WAYRELAT <sup>a</sup>		WAYATTIT <sup>a</sup>		NATUPROB		NATUSOLU		PROBSEVE		INFOEX <sup>a</sup>		CLINIASS <sup>a</sup>		OPENSELE	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Northeast	110	1.93	.60	1.56	.50	1.79	.41	1.76	.43	1.27	.45	1.51	.52	2.12	.65	1.47	.50	1.21	.41	2.90	.36
West	81	1.91	.63	1.62	.49	1.74	.44	1.53	.50	1.44	.55	1.52	.50	1.81	.76	1.23	.33	1.43	.50	2.90	.34
Southwest	110	2.01	.76	1.66	.47	1.71	.46	1.66	.58	1.65	.78	1.67	.47	2.07	.73	1.04	.19	1.49	.52	2.79	.43
Midwest	21	2.38	.02	1.29	.46	1.48	.51	1.52	.51	1.19	.40	1.48	.51	1.95	.74	1.38	.50	1.29	.46	2.95	.22
		F=281*		F=3.78***		F=3.13**		F=3.13**		F=8.64****		F=2.63**		F=3.22**		F=28.28****		F=7.25****		F=2.41*	

Table continues





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