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A STUDY OF FAMILY BURDEN: AN EXAMINATION OF THE RELATIONSHIP BETWEEN CLIENT PROBLEMS AND DISTRESS IN A SIGNIFICANT OTHER

By

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ABSTRACT

A STUDY OF FAMILY BURDEN: AN EXAMINATION
OF THE RELATIONSHIP BETWEEN CLIENT PROBLEMS
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This study examines the relationship between client problems and distress in a significant other. Previous research on families with discharged psychiatric patients has reported a relationship between the level of client symptomatic disturbance and social functioning and distress in a significant other. The origin of this association has been interpreted in two ways. Some investigators have interpreted distress in the significant other as a result of the burden a symptomatic patient places on the family. Other investigators have suggested that the direction of causality may be just the opposite: the actions of a disturbed family may account for the distress in the patient. The central objective of this study was to compare these competing causal hypotheses and to explore the nature of the linkage between client distress and distress in a significant other.

Data for this analysis was obtained from the Michigan Department of Mental Health's Tri-County Mental Health Study. In this study, inpatients and outpatients in seven community agencies were assessed at intake, three months, and six months after intake. Clients were assessed by self-report (Brief Symptom Inventory, Derogatis, 1977), and

by a significant other (PARS V Community Adjustment Scale, Ellsworth, 1974). In addition, significant others were asked to provide information on themselves (Profile of Mood States, McNair, Lorr, Doppleman, 1972), the burden of the patient on the family (Family Burden Scale, Wright, 1979), and the amount of time in face-to-face contact with the client.

Self report data were available on 110 inpatients and 526 outpatients. Significant others provided data on 238 outpatients and 38 inpatients. However, significant others provided less information on themselves. Combining inpatients and outpatients, POMS data were available on 141 clients at intake. Cross-lagged panel analysis, which requires complete data sets, was conducted on a total sample of 50 outpatients.

The results of the study confirm previous findings of a high degree of association between distress in a significant other and client symptoms and social functioning. Distress in the significant other was also associated with the amount of time in face-to-face contact with the client. A series of partial correlation analyses suggests that more disturbed significant others spent more time with clients. This interpretation is congruent with the findings of Brown et al. (1972) relating high contact with client deterioration.

Additional analysis indicated that the linkage between client and significant other distress may be mediated by other variables. For example, clients in parental families showed poorer functioning than clients in conjugal families. However, the significant others in

parental families reported less distress than significant others in conjugal families. It appears that spouses are far more vulnerable to client disturbance than parents. Thus, the association between distress in a client and significant other is mediated by the role relationship.

A cross-lagged panel correlational analysis was conducted to assess the predominant direction of effects between distress in the client and significant other over time. The findings confirm the hypothesis that the significant other has the stronger impact on the client's disturbance. In this sample, the significant other was causally implicated in the client's obsessive-compulsiveness, interpersonal insensitivity, additional psychopathology, anxiety, anger, suicidal concern, inattention to children, and upsetting others at home. These findings were more evident in the longest internal (six months), suggesting that this process is cumulative.

It should be noted that these results from the cross-lagged panel analysis do not suggest a unilateral model of causation but rather indicate the balance of a process over time. The relative power of the significant other in exacerbating client symptoms, instead of vice versa, may be speculatively explained in at least three ways. The client may have poorer ego boundaries, rendering him more susceptible to feeling the distress of the significant other. Or, the client may be more likely to internalize the negative aspects of interaction with the significant other. This would account for the delayed accumulation of distress in the client which is detected in the cross-lagged correlations. Finally, if the significant other represents the feelings of a

number of others in the family, the apparent vulnerability of the client may be understood in relationship to a distressed family group. The group is simply stronger than the individual client.

Further research and, in particular, observational study is necessary to understand the mechanisms by which the significant other influences the client. And, while the present analysis of the direction of effects needs to be replicated on a larger sample of inpatients and outpatients, the implications for treatment are straightforward. Effective treatment must take into account a potentially deleterious interaction between client and his significant other.

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INTRODUCTION

As the psychological study of the family has developed, considerable theory and research has focused on the family unit in the etiology or treatment of emotional disturbance. However, at the border between the conceptual areas of etiology and treatment lies a less explored area: the interaction between the family environment and the treatment outcome of the identified patient. The importance of the family in the treatment outcome of the individual member has been highlighted by changing policies toward the treatment of psychiatric patients. With the advent of the major tranquilizers and the community mental health movement, the pattern of long-term chronic hospitalization has begun to give way to short-term, multiple hospitalizations followed, presumably, by community aftercare. In spite of increased interest in halfway houses and other alternatives to hospitalization, the discharged patient is still most likely to return to a family setting (Kreisman and Joy, 1975). The early return of the discharged patient to his family has a number of advantages, among them the reduction of chronic hospitalization and the maintenance of family ties as fundamental supports for the patient's reintegration into the community.

Nevertheless, the fact that 30 percent of discharged patients return to the hospital within one year and 72 percent of all hospitalizations are readmissions (Taube, 1974) should focus attention on the vicissitudes of the patients' return to the community. Since for many

patients return to the community is nearly synonomous with return to the family, a crucial facet of post-hospital adjustment must be the process by which the patient reenters his family. Although the policy of shortened hospitalization has, in effect, shifted a significant portion of responsibility for disturbed individuals from the state back to the family, there is still little understanding of how this works for either patients or their families. The seriousness of their situation is suggested by a recent study of discharged schizophrenics (Astrachan, Brauer, Harrow, and Schwartz, 1974) which showed that even two to three years after discharge no patients were symptom free and that nearly one quarter of the sample showed considerable symptoms of psychosis.

The statistics on recidivism have made abundantly clear that returning the patient to the community is no panacea. An understanding of the process by which some patients fail and others succeed in being maintained by their families could be helpful pragmatically, in improving rehabilitation, and, theoretically, in providing a perspective on the relationship between family dynamics and disturbance in the identified patient. Traditionally, the role of the family in an individual member's disturbance has been looked at etiologically, often assuming that the direction of effects is largely from the family to the patient (Frank, 1965). While the study of the family-patient relationship following hospitalization cannot address fundamental issues of etiology, this research does suggest that the discharged patient may be returned to the hospital because of the family's dynamics rather than the patient's emotional disturbance (Lidz, Fleck, and Cornelison, 1965).

The situation has been succinctly described by Scott (1974, pp. 69-70),

> ... the unquestioned assumption that the patients entered the hospital because they were ill was a myth.... Mental illness is not a myth but coming to the hospital because of illness is a myth.... A patient may be ill, but it is purely incidental to his mode of admission.

In contrast, much of the research on the post-discharge adjustment of patients has assumed that the patient is returned to the hospital when his behaviors become too burdensome for his family (Michaux, Katz, Kurland, and Gansereit, 1969). The efforts to quantify family burden have worked from the assumption that the major direction of effects is from the patient's burdensome behaviors to the decision of the significant others to hospitalize the patient (Grad and Sainsbury, 1963; Herz, Endicott, and Spitzer, 1976; Hoenig and Hamilton, 1969).

Although most investigators would probably concede that the process is ultimately an interactive one, most of the literature contains implicit assumptions of unidirectional effects. While these issues have been explored with inpatient populations, the same theoretical questions can be raised with respect to outpatients. In fact, an outpatient population could show the effect of patient-family interaction on treatment effectiveness without the confounding reentry problems inherent in the study of inpatients. The current literature, however, has been confined primarily to the study of inpatients.

LITERATURE REVIEW

The study of post-discharge adjustment of mental patients and their families began with sociologically oriented investigators interested in problems of deviance and social control. These interests were operationalized in studies of family members' perceptions of the sick or deviant member, the stigma for the family, and the consequent attitudes toward the deviant member.

Early research on the family's perception and labeling of the "mentally ill" member was guided by the assumption that the family would go through a predictable sequence of both acceptance and denial in grappling with the yet undefined deviant behaviors (Lederer, 1952). A natural model was the pattern found in the physically disabled (Barker, 1948): anxiety, anger, and denial, followed by diagnosis and consequent definition of being sick, followed ultimately by convalescence and rehabilitation. While this model was based on the patient's reactions to illness, Yarrow, Schwartz, Murphy, and Deasy's classic study (1955) showed a parallel pattern in the reaction of wives to their husbands' psychiatric hospitalization. The investigators were particularly interested in the process by which wives slowly began to recognize their husbands' symptomatic behaviors as problems. Initially the wives tried to put their husbands' symptoms in a framework of normal behavior. They downplayed the seriousness of the behaviors and tried to balance

strange behaviors with the persistence of normal behaviors. Although there was some indication that the wives used anger as a social control of their husbands' deviant behaviors, the frequency of reported anger was much lower than the frequency of symptomatic behaviors which could be expected to elicit anger (e.g., emptying drawers, yelling, and arguing). This may be due to the retrospective interviews in which wives were likely to underreport any of their behaviors which could have been seen as contributing to their husbands' problems. Whatever the case, the study clearly documents the uncertainty, vacillation, and denial in this volatile period leading to hospitalization. The difficulties reported raise additional questions about whether the wives were feeling and communicating more hostility to their husbands than they reported.

Other studies (Schwartz, 1965; Clausen, 1959) investigating the stigma surrounding mental illness in families found considerable anger and resentment toward decompensating spouses prior to hospitalization. The perception of stigma, however, did not seem to play as central a role as sociological theory would suggest (Goffman, 1963). For example, in Lewis and Zeichner's (1960) sample, 50 percent of the respondents expressed sympathetic understanding and only 17 percent expressed hostility or fear. In Rose's (1959) sample of relatives of hospitalized patients, the majority reported no stigma and said they freely discussed the hospitalization with other people.

Certainly studies in which the significant other is asked to attribute his distress directly to the "sick" family member are vulnerable to underreporting and, without controls for socially desirable

responses, it is difficult to assess any absolute level of shame or stigma in these families. However, Grad and Sainsbury (1963) asked their respondents about specific patient behaviors which bothered them and thereby may have been able to moderate the effect of social desirability. While the overall level of complaints may still have been underreported, it is interesting to note that socially conspicuous and embarrassing behaviors were reported very infrequently in comparison to somatic complaints or dangerous behaviors. Therefore, it seems that stigma, even when present, is far from being the most salient problem for families with a hospitalized member.

Given the limitations of studies of social perception and stigma, a number of sociologically oriented investigators have looked more closely at a range of family attitudes for their possible effect on the discharged patient. In a major study of 714 patients and families, Freeman and Simmons (1963) examined the family's tolerance for deviant behavior as the critical variable affecting the discharged patient's community tenure. Tolerance of deviance was defined as "the continued acceptance of the former patient by his family members, even when he fails to perform in instrumental roles (1963, p. 6)." They found support for this hypothesis in the differences between patients discharged to parental and conjugal homes. Patients in parental homes had poorer instrumental role performance than patients in conjugal homes but the patients in parental homes were, nevertheless, hospitalized less frequently. The inference was that mothers could afford to be more tolerant of deviant sons than wives, who were more dependent on the instrumental role performance of their husbands.

In addition to a wide range of demographic and performance measures the investigators used a number of scales to measure the social-psychological characteristics of family members. Many of the scales, such as Anomia and Authoritarianism, reflected the basically sociological concerns of the study. The authors acknowledged the difficulty of imputing meaning to the 5-item scales which did predict to patient performance (Anomia, Authoritarianism, Frustration, Rigidity, Withdrawal, Autism, and Cycloid Thinking). Their tentative interpretation, however, was that the dimension underlying these scales was a sense of social potency. Thus the patients who stayed longer in the community had family members who indicated a higher degree of social competence and efficacy.

A parallel study (Pasamanick, Dinitz, and Lefton, 1959) and further data analysis led Freeman and Simmons to conclude that differential tolerance "provided only limited understanding ... of the patient's success or failure in remaining in the community" (Freeman and Simmons, 1963, p. 196). Their final conclusion, essentially, was that patients are hospitalized because of a resurgence of bizarre symptoms and not because of a failure in instrumental role performance. They also offered two interesting explanations for the lack of relationship between community tenure and performance levels. First, their data suggested that regardless of cultural and social psychological differences in families, their responses to bizarre symptomatic behavior are essentially the same. Second, they suggested that

> the genesis of behavior that is typically associated with hospitalization is not strategically affected by the

> relatively static social characteristics of families or the gross interpersonal attributes of family members (1963, p. 198).

This conclusion exemplifies the school of thought that mental illness, particularly schizophrenia, is a process largely independent of the family environment. When the symptomatic disturbance reaches the level which is intolerable for the family the patient is then returned to the hospital. Yet the authors themselves suggest two major qualifications to this conclusion. This study tapped only "static social characteristics" and "gross interpersonal attributes". To the extent that the personality scales used in the study were concerned with stable sociological constructs, they may have failed to tap into the more elusive affective interior of the family, which may be more important in the origin and elaboration of the patient's symptoms. In spite of these reservations, this study provides data central to the perspective that the family environment is reactive to, rather than instigative of, the patient's disturbance.

While sociologically oriented investigators have played a major role in understanding the parameters of post-hospital adjustment, they have been less successful in looking at the process of the hospitalization experience for the patient and his family. Consequently, many of the dynamic psychological issues have received less attention. While it is probably true that hospitalization is more related to symptomatic disturbance than failures in instrumental role performance, this conclusion begs the question of what process exacerbated the symptoms. It seems necessary to place the issue of post-hospital adjustment in the perspective of a longer process model. Without becoming entangled in

the fundamental issue of etiology, a process model of hospitalization would include, as a minimum, a consideration of the admission, treatment, discharge, and post-hospital adjustment. In many cases this model would be cyclical, moving through multiple hospitalizations. The remainder of the literature will be organized around these stages, which may clarify some of the theoretical and methodological issues in a process approach to the relationship between a mental patient and his family.

Hospital Admission

The study of precipitants has been a focal concern in the initial phase of hospitalization (Hudgens, Morrison, and Barchha, 1967; Steinberg and Durell, 1968; and Vaillant, 1964). In a study of stressful events preceding hospitalization Birley and Brown (1970) distinguished between events which could or could not have been influenced by abnormal behavior of the patient. Their results showed that in the three weeks prior to hospitalization there was a high rate of stressful events which were independent of the patient's behavior (e.g., the death of a parent).

The interplay between stressful events, increased symptomatology, and family disequilibrium make interpretation of the admission phase problematic. Lidz, Fleck, and Cornelison (1965, p. 274) suggest that "... admission to an institution tends to be determined not by a change in the patient's intrinsic pathological condition or process but rather by a shift in the family equilibrium or perhaps in the patient's extrafamilial environment". While presenting symptomatology has been

extensively studied, it is unclear how the patient and his family perceive change (or lack of it) in the patient's condition prior to hospitalization. It seems likely that families who report only minor changes prior to hospitalization may be quite different from those who report major changes. These patterns may be suggestive of differing onsets and outcomes.

Treatment

In a recent experimental study of brief vs. standard hospitalization, Herz, Endicott, and Spitzer (1976, 1975) have examined the relationship between length of hospitalization and family distress. A central finding was that random assignment to brief or standard hospitalization did not affect the family's burden in the long run, but families of briefly hospitalized patients did report more burden at three weeks after discharge. Brief hospitalization appeared to have a mixed impact on families: these patients created a greater initial burden yet resumed their wage earning roles more quickly.

This study illustrates some of the difficulties in sorting out the impact of hospitalization from the emotional distress itself. There was very little difference in the subjective distress of families whether the patient was at home or in the hospital. For example, family members reported nervousness and insomnia regardless of where the patient was. This issue was perhaps less clear with respect to children. About three quarters who reported an unhappy or upset child attributed this to the patient's condition, regardless of whether the patient was at home or in the hospital. However, rare reports of hyperactive, disobedient,

or angry children occurred only in families where the patient was at home. While some children are more upset by the immediate presence of an emotionally disturbed parent, hospitalization and separation may create their own problems so that there is ultimately little difference whether the parent is at home or in the hospital.

An unexpected finding of the study was that standard hospitalization produced more intolerance of the patient than brief hospitalization. By six months after discharge twice as many families of the standard hospitalization group thought the patient should be rehospitalized. This suggests that the longer the separation the less tolerance the families feel for the patient.

Discharge

The discharge of the patient can revivify the same emotional conflicts in the family which preceded hospitalization. Scott and Ashworth (1967) argue that the initial hospitalization signifies the family's efforts at closure, the severance of all bonds of relatedness between patient and family. This process can take place in chaos or in silence. Scott suggests that closure can quickly ossify into an awesome barrier to the reintegration of the patient. Similarly, Lidz, Hotchkiss, and Greenblatt (1957) have observed family withdrawal starting at the time of admission. In contrast to the observation that closure begins immediately at the first hospitalization, in a study of husbands of hospitalized wives Dinitz (169) found that the critical point occurred after the first or second hospitalization. With three or more hospitalizations general withdrawal and closure became pronounced.

The phenomenon of closure seems to have both psychological and sociological components. Cummings and Cummings (1957) reported the case of a patient who had lived with her sister for years, despite florid hallucinations of "sex rays". When the sister was late returning from a vacation the woman became more agitated and entered a hospital for the first time. Upon discharge, the sister was very reluctant to have the patient back because she was now labeled as being mentally ill and was therefore very frightening.

In contrast to patterns of withdrawal and closure, other clinicians (Lemkau, 1968; Lidz, Fleck, and Cornelison, 1965) report the frequent pattern of families who resist the hospitalization of a member and often remove the patient against professional advice. Studies of family attitudes toward discharge commonly report positive attitudes about the patient coming home, although it is reasonable to believe that whatever closure exists is masked to some extent (Lidz et al., 1965). Freeman and Simmons (1963) found that 95 percent of the families in their study wanted the patient to return home to live with them. Similarly, Pasamanick, Scarpitti, and Dinitz (1967) found that the marital bonds between patient and spouse were still strong at discharge. Other studies have shown that willingness to reaccept the patient is inversely related to the length of hospitalization (Evans, Bullard, and Soloman, 1961; Rawnsley, Loudon, and Miles, 1962) and while the family may be verbally agreeable to discharge, resistance can increase as discharge nears (Rose, 1959).

Social class is another variable important in understanding the relationship between a mental patient and his family. Hollingshead and Redlich (1958) found that many patients in the lowest social class were not discharged because no one would have them at home. In a re-analysis of part of this same sample Myers and Bean (1968) found that the label of mental illness and the family's sense of burden operated to reduce contacts with the hospitalized patients. As would be predicted with Scott's (1975) concept of family closure, families cut more ties with each hospitalization. This phenomenon was most pronounced in the lowest classes.

Post-discharge Family Adjustment

The post-discharge period has been a major focus in the attempt to unravel sociological, familial, and individual symptomatic factors in the relapse of mental patients. The three major areas of research have focused on the impact of the type of family (parental vs. conjugal), the burden of the patient on the family, and the affective climate of the family.

Simmons and Freeman (1963) found that patients returned to a parental situation performed more poorly but were rehospitalized less frequently. These findings also conform to the hypothesis that a person must attain a higher level of functioning to get married and is consequently less likely to develop chronic problems (Astrup, Fossum, and Holmboe, 1962). In contrast, a number of recent studies have found no outcome differences based on family composition (Michaux et al., 1969; Pasamanick et al., 1967; Brown, Bone, Dalison, and Wing, 1966).

The contradictory findings suggest that family composition may not be as important as the interactional process between patient and family.

In an attempt to understand the impact of a discharged patient on his family, a number of researchers have tried to assess burden on the family. Grad and Sainsbury (1968) compared family burden in community care and a traditional psychiatric hospital in Britain. Although the two catchment areas were slightly different, the data clearly indicated that the community care service (emphasizing brief hospitalization) forced a greater burden of patient problems on families. As the first major study of family burden (N=410) their methodology and additional findings are of some interest.

Family burden was assessed in interviews concerning the effect of the patient on work, leisure, income, health, and children. Patient behaviors most likely to disturb the family were rated and, in addition, global ratings of burden were made by the interviewers. At one month after referral there was a reduction in family burden, particularly in severely burdened families. Although the authors attributed this reduction to contact with the psychiatric services, the lack of a control group renders this inference unwarranted.

The families which were most heavily burdened had patients with organic psychoses or personality disorders. Duration of illness was also strongly associated with degree of burden. The behaviors which families complained of most were, in order, the patient's preoccupation with somatic complaints, fear that the patient would harm himself, and demandingness. The rating of burden was associated with the presence of

five symptoms: aggression, delusions, hallucinations, confusion, and inability to care for self. Dangerous and socially embarrassing behaviors were reported very infrequently.

In addition to studying burdensome behaviors, Grad and Sainsbury (1968) tried to assess the effects on the mental health of the families. One-fifth of the informants complained of such symptoms as insomnia, headaches, irritability, and depression. The assumption in this study was that these symptoms were caused by the patients' behaviors. In about a third of the families, disruption was reported in domestic, social, and leisure activities. One-quarter of the families reported a reduction in income of at least 10 percent over the two years following hsopitalization.

The effects on children were less clear. One-third of the families with children reported adverse effects such as acting out, school difficulties, anxiety, and unhappiness. The investigators felt the effects on children may have been underreported since they were not assessed directly. In a finding similar to that reported by Herz, Endicott, and Spitzer (1976), the psychiatric service which more readily admitted patients did not seem to ameliorate the impact on the children.

The Manhattan sample used by Herz et al. (1976) reported a somewhat different pattern of burdensome behavior than Grad and Sainsbury's British sample (1968). Almost two-thirds of the Manhattan sample reported worrying about the future because of the patients' problems. Other frequently reported symptoms were similar to those reported by the British sample: insomnia, nervousness, having to be careful not to

upset the patient, and worry about financial problems. Also similar was the infrequency of being embarrassed or ashamed by the patients' behaviors. It is striking that irritation and anger were the patient behaviors complained about most frequently. In results similar to the British study, the patient symptoms most correlated with family burden were belligerance, unpleasantness, disorganization, and impaired reality testing. In the study by Pasamanick et al. (Davis, Dinitz, and Pasamanick, 1974) the pattern was much the same, with 44 percent of the significant others complaining of uncooperative patient behaviors.

The study of family burden is invariably composed of two theoretically interlocked components: burdensome (deviant, symptomatic) patient behaviors and distress in the family members. Hoenig and Hamilton (1969) have labeled these components objective and subjective burden. While it seems somewhat tenuous to assume that one is more objective than the other, it is helpful to remember that the two components are separate and it is their linkage which is more objective.

In a study of 176 English families, Hoenig and Hamilton (1969) rated 56 percent of the families as operating under objective burden. In contrast, only 14 percent reported severe subjective distress, 40 percent reported moderate burden, and 46 percent reported no burden at all. The investigators concluded that there was a great deal of subjective tolerance given the high degree of objective burden.

While the studies of family burden imply that the direction of causality is from the patient's symptoms (burdensome behaviors) to distress in the significant others, a series of major studies in England suggest that the direction of causality may be just the opposite

(Brown, Birley, and Wing, 1972; Brown et al., 1962; Brown and Rutter, 1966). After an initial finding (Brown et al., 1966) that discharged schizophrenics who lived with relatives returned to the hospital more frequently than patients who lived alone, these investigators began to look more closely at the affective environment in these families.

Based on 4 to 5 hours of interviews, family members were rated on critical comments, hostility, warmth, and emotional overinvolvement. In a follow-up study of 101 schizophrenic patients and their families, the resurgence of symptoms was correlated with three of the four interview measures: critical comments, hostility, and emotional overinvolvement. These three scales were combined and labeled Expressed Emotion (EE). The rate of symptomatic relapse was almost four times higher in high EE families than in low EE families. The choice of the term Expressed Emotion comes from a theoretical interest in the high physiological arousal seen in schizophrenics; yet the scale could just as aptly be described as an index of hostile symbiosis.

Given the association between symptomatic relapse and high EE in the families, an effort was made to discern the direction of effects. In the data analysis, work impairment and behavioral disturbance were statistically controlled without significantly reducing the association between high EE and relapse. However, when EE was controlled for, the association between work impairment/behavioral disturbance and symptomatic relapse became negligible. These findings suggested a clear link between relatives' EE and the patients' relapse.

In a replication, Vaughn and Leff (1976) compared depressed and schizophrenic patients. Critical comments and EE were again found to correlate significantly with relapse. After combining depressed and schizophrenic patients a correlation matrix of factors associated with relapse was generated. Expressed Emotion was more highly related to relapse than any other factor including previous hospitalization and maintenance on major tranquilizers. Behavioral disturbance was correlated negatively with relapse and, when partialed out, the correlation between EE and relapse was undiminished (r=.52).

While these studies indicate the importance of the EE of relatives, the exploration of EE in the patients themselves was less successful. Only 10 percent of the patients made critical comments about relatives (34 percent of the relatives made critical comments about patients) and there was no relationship between patients' EE and relapse.

The studies of family burden document a wide range of hostile, symptomatic behaviors. This suggests that the paucity of critical comments from the patients underrepresents their true expression of hostility at home. Therefore, while this research suggests that the affective environment at home is more strongly associated with relapse than the patient's work impairment and behavioral disturbance, it seems premature to dismiss the patient's affective contribution to the home environment.

The study of the post-discharge adjustment of the patient and his family provides an opportunity to examine the interplay of individual symptomatology and the family environment. The concept of family burden, while highlighting some of the very real difficulties experienced by

families living with discharged patients, has perhaps oversimplified a complex web of interrelationships between the patient's symptomatic distress, social functioning, and distress in the significant others. It has been demonstrated that patients with poor social functioning have significant others who report considerable difficulties, but the affective components and processes are less clear. Some studies reviewed here concluded that while the relationship between patient and family is important, the somehow independent resurgence of symptoms is the major determinant of rehospitalization. The studies by Brown et al. (1972) implicating the emotional characteristics of the significant other in this resurgence point to the centrality of the affective relationship between patient and family.

All the major studies of family burden (Davis et al., 1974; Grad and Sainsbury, 1968; Hoenig and Hamilton, 1969) suggest that there is far more than a "burden" being placed on the family. In fact, there are persistent complaints of uncooperativeness, belligerence, and conflict in these families. Most of these same studies assume a direction of causality from patient to family and consequently fail to examine the hostile or angry contribution of the family. Conversely, Brown et al. appear to have tapped successfully into the hostility of these families but have, perhaps, been less successful in measuring the affective contribution of the patient.

From both camps, hostility appears to be a central variable which must be traced in this complex interaction between patient and family. It may well be that some of the difficulty in unraveling this relationship can be attributed to differences in communicational modalities:

families may be more likely to use a verbal modality in their expression of hostility (at least to Brown and his interviewers) while patients may be more likely to use a behavioral modality in their expression of hostility (symptomatic, burdensome behaviors). Clearly a further examination of this relationship, tapping a wider range of the patient's affective contribution, seems an appropriate next step in understanding post-discharge adjustment. In addition, an examination of these relationships in inpatients as well as outpatients could clarify our understanding of the interplay of individual and familial variables in treatment outcomes across a wider range of problems and families.

HYPOTHESES

To examine the relationship between distress in the client and significant other, the hypotheses below test for specific relationships between client variables and "significant other" variables. Hypothesis 1 tests for the relationship between distress in the client and significant other. Then, Hypothesis 2 tests for the causal direction in this relationship over time. Hypotheses 3, 4, and 5 posit differences in burden between inpatients and outpatients, parental and conjugal families.

To facilitate a finer analysis of the broad concept of family burden, the hypotheses deal with specific variables such as symptomatic distress, social functioning, and distress in the significant other. The term significant other refers to the person designated by the client to provide questionnaire ratings. In almost all cases the significant others are relatives or friends living with the client. Distress in the significant other is measured by the Profile of Mood States (POMS). Symptomatic distress and social functioning are client variables, measured respectively by the Brief Symptom Inventory (BSI) and PARS V Community Adjustment Scale (PARS).

Hypothesis 1:

Client symptomatic distress and social functioning are correlated with distress in the significant other.

Hypothesis 2:

Distress in the significant other will be causally predominant in the resurgence of client problems. Specifically,

a) The correlation between the client's symptomatic distress at intake and the significant other's distress at three months is significantly weaker than the correlation between the significant other's distress at intake and the client's symptomatic distress at three months.

b) The correlation between the client's social functioning at intake and the significant other's distress at three months is significantly weaker than the correlation between the significant other's distress at intake and the client's social functioning at three months.

c) The same relationships will hold from intake to three months to six months.

Hypothesis 3:

Family burden will be higher for inpatients than for outpatients.

a) Social functioning will be lower in inpatients than outpatients.

b) Symptomatic distress will be higher in inpatients than outpatients.

c) Distress in the significant others will be greater if the client is an inpatient rather than an outpatient.

Hypothesis 4:

Clients in parental families will show lower social functioning than clients in conjugal families.

Hypothesis 5:

Clients in conjugal families will have significant others who report more distress than significant others in parental families.

METHOD

Context

The data for this study was collected as part of the Tri-County Mental Health Study, a pilot state mental health outcome monitoring system. The study originated in an Urban Institute proposal (Schainblatt, 1977) and was conducted by the Michigan Department of Mental Health (LaFerriere, 1979).

The original study, as proposed by the Urban Institute, was primarily concerned with questionnaire response rates. Efforts to expand the scope of the study were met with considerable resistance due to fears that the response rates might be adversely affected. Consequently, data from significant others, which were central to the hypotheses of this study, was available on only a subset of the larger sample.

Subjects

The subjects in this study were drawn from all the public community mental health agencies in Clinton, Eaton, and Ingham counties and one private hospital. The inpatient agencies involved were the St. Lawrence Psychiatric Unit, the Michigan Institute of Mental Health, and the Ingham Community Mental Health Center Inpatient Unit. The outpatient agencies were the Capitol Area, Ingham, and Mason Community Mental Health Centers and the Clinton and Eaton County Counseling Centers.

All clients initiating contact with these agencies between August 1 and October 31, 1977, were asked to participate in the study. Data were obtained from 110 inpatients, who had a mean age of 38 years and a mean of 9.6 years of formal education. Inpatients were 86 percent white and 65 percent male. Twenty percent of inpatients reported an annual income of less than $4,000, 15 percent between $4,000 and $8,000, 25 percent between $8,000 and $12,000, and 40 percent above $12,000. Data were also obtained from 526 outpatients, who had a mean age of 33 years and a mean of 12.3 years of formal education. Outpatients were 94 percent white and 74 percent female. Thirty-seven percent reported an annual income of less than $4,000, 10 percent between $4,000 and $8,000, 15 percent between $8,000 and $12,000, and 40 percent over $12,000.

Unfortunately, data from significant others were much more difficult to obtain. Significant others provided some information on 238 outpatients and 38 inpatients. However, significant others provided still less information on themselves. Combining inpatients and outpatients, POMS data were available on only 141 clients at intake. Because of these variations, the sample size relevant to each hypothesis is specified in the results section.

Sample size variations were a particular problem in the cross-lagged panel analysis, which requires complete data sets at two points in time. Because the Urban Institute was concerned that any addition to the questionnaires would affect response rates, the POMS was included for only a random subsample of the participants. Consequently, complete

data sets were available for only 9 inpatients, making statistical analysis of this group impossible. Nevertheless, complete data sets were available for 50 outpatients in the initial-six month interval, 36 in the initial-three months interval, and 37 in the three month-six month interval. The demographic characteristics of this smaller sample were essentially the same as in the larger sample. Mean age was 33 years and mean years of education was 12.5 years.

Instruments

The measurement of the central variables, social functioning, symptomatic distress, and distress in the significant other, are discussed in detail below. Client social functioning is measured by the PARS V. Client symptomatic distress is measured by the Brief Symptom Inventory (BSI). For a more complete measure of family burden, eight additional items were included as a family burden scale. Distress in the significant other is measured by the Profile of Mood States (POMS). The complete instruments are included in the Appendix.

Patient distress was measured by the Brief Symptom Inventory (BSI) (Derogatis, 1977) which is the short form of the SCL-90-R, a self-report inventory of symptom patterns of psychiatric and medical patients (Derogatis, Rickels, and Rock, 1976). The major validation work was done on the SCL-90-R rather than the BSI, but the correlations of the symptom dimensions on the two forms range from .92 to .99. Test-retest reliabilities on the individual scales range from .70 to .90. Internal consistency (coefficient α) ranges from .77 to .90. The invariance coefficients of the scales range from .51 to .85. The scale consists of

50 5-point items. The BSI measures psychopathology along nine primary dimensions: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. These scales, when combined, also produce a summary symptom scale.

Client social functioning was measured by the PARS V Community Adjustment Scale (Ellsworth, 1974). The PARS is a 51 item questionnaire completed by the client's designated significant other. The items cluster into eight scales: household management, interpersonal involvement, anxiety-depression, relationship to children, confusion, alcohol/drug abuse, outside social, and employment. The PARS also produces two summary scores: Role Skills (Social Functioning) and Symptoms. Extensive data on the stability, internal consistency, and intercorrelations of the factor scales are reported in Ellsworth (1974). Briefly, test-retest reliabilities for the scales range from .66 to .97. Internal consistency (coefficient α) ranges from .67 to .94.

Item by item examination of the PARS showed that it contained nearly all the burden items reported by at least 7 percent of the samples studied by Grad and Sainsbury (1963) and Herz et al. (1976). Eight items on hostility, danger to self, financial burden, and disturbances in children and others in the home were added to complete the pool of family burden items. These eight items are referred to as the family burden items in the analysis.

Affective qualities of the significant other were measured by the Profile of Mood States (POMS) (McNair, Lorr, Doppleman, 1972). The POMS is a factor analytically derived inventory of 65 5-point adjective

rating scales. Four factors were used in this study: Anger-Hostility, Tension-Anxiety, Depression-Dejection, and Fatigue-Intertia. Internal consistency and test-retest reliabilities range from .65 to .74 and .66 to .70 respectively (McNair and Lorr, 1964). Further indications of the reliability of the POMS comes from the similarities of factor structure and loadings in a number of studies (Lorr, Daston, and Smith, 1976; Lorr, McNair, and Weinstein, 1963; McNair and Lorr, 1964.

Significant others were asked to report hours per week of face-to-face contact with the client. This measure of contact was derived from Brown et al. (1972) and was included to allow a reanalysis of the relationship between high contact and symptomatic deterioration.

Data Collection

At intake the participating clients completed the BSI and designated a significant other to complete the PARS and POMS. At three months after the initiation of treatment, 66 percent of the inpatients and 25 percent of the outpatients were randomly given complete instrument sets, including the POMS. This division of the sample was dictated by the state's interest in response rates on the shorter battery. At six months all inpatients and one-half of the outpatients were again administered the full assessment battery.

RESULTS

Statistical Analysis

A variety of statistical techniques were utilized in analyzing the data. Hypothesis 1 was examined by correlational analysis and Hypotheses 3, 4, and 5 by t-tests. Hypothesis 2, which posited a causal relationship, was examined by cross-lagged panel correlational analysis (Campbell and Stanley, 1963; Pelz and Andrews, 1964). Because this technique has been used relatively infrequently in psychology, a brief explanation of this procedure may be useful.

Cross-lagged panel correlational analysis is an inferential tool for comparing the relative strength of competing causal hypotheses. Using panel data, two lagged cross-sectional correlations are tested for significant differences. An example drawn from the present study illustrates the inferential process (Figure 1).

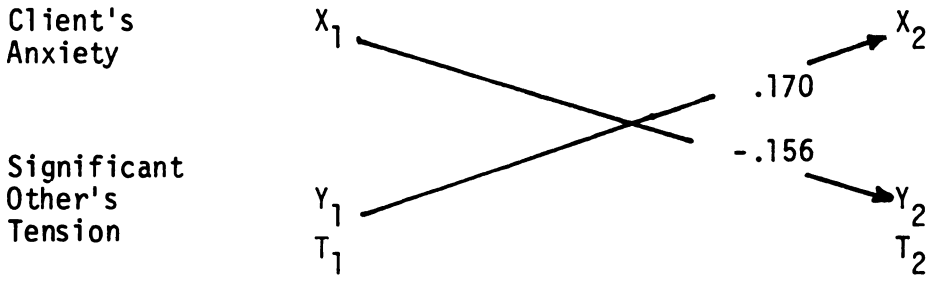

Figure 1. Cross lagged Correlations between Client Anxiety and Significant Other's Tension.

In considering the association between anxiety in the client and tension in the significant other, two directions of causality are plausible. One could hypothesize that the client's anxiety, over time, causes tension in the significant other. In this case, the cross-lagged correlation, rx_1y_2, should be stronger. Or, one could hypothesize that the significant other's tension at intake is causally predominant in the client's anxiety at follow-up. In this case the cross-lagged correlation, ry_1x_2, should be stronger. In this example, the relatively stronger association between the significant other's tension at intake and the client's anxiety at follow-up tends to confirm the latter hypothesis, that it is the significant other who has the greater impact rather than the client.

The program PANAL (Kenney, 1976) was used for the cross-lagged panel analysis. This program corrects the cross-lagged panel correlations for attenuation to rule out spurious findings due to shifts in variable reliabilities. The differences between the resulting correlations are tested for significance by the standard t-test.

It should be noted that the cross-lagged panel analysis is a conservative technique which tends to underestimate the strength of the causal relationship. This occurs because much of the causal effect is simultaneous (contained in the synchronous correlations rx_1y_1, rx_2y_2) and does not enter into the cross-lagged analysis. Rozelle and Campbell (1969, p. 771) note that "much of the cause and effect relationship will be shown within a single wave of panel study and will hence be treated as (a) common background factor, leading to an inevitable underestimate of the causal relations." Thus, while cross-lagged panel analysis is a

quasi-experimental technique, it is nevertheless a quite conservative method for inferring causality.

Hypothesis 1: Client symptomatic distress and social functioning are correlated with distress in the significant other.

Hypothesis 1 was tested on a sample of 141 clients (inpatients and outpatients) in intake, 68 at three months, and 72 at six months after intake. A matrix of correlation was computed between client symptomatic distress (BSI), social functioning (PARS), family burden, and distress in the significant other (POMS). The correlations of the summary scales at intake, three months, and six months are contained in Table 1.

The data strongly support the hypothesized relationships between client symptoms, social functioning, and distress in the significant other. At intake, all summary client scales were correlated with significant other distress at a significance level of at least $P \leq .01$.

The association between distress in the client and significant other is stronger at intake than at the follow-up. This difference reflects a slightly lower absolute level of association (r values) and a definitively lower level of statistical significance, largely due to the smaller sample size at the follow-ups.

In conclusion, there is strong support for Hypothesis 1. The data show a clear positive association between distress in the significant other and client symptomatic distress and social functioning.

Further examination of this matrix reveals a significant correlation between the amount of distress reported by the significant other and the amount of time in face-to-face contact with the client.

Table 1. Correlations of Client Disturbance Variables and Significant Other's Distress

Client Summary Scales		Initial POMS Mean	Three Months POMS Mean	Six Months POMS Mean
General Severity Index (BSI)	N =	(139)	(66)	(53)
		.22***	.08	.36**
Drug Abuse (PARS)	N =	(138)	(66)	(69)
		.25***	.22*	.23*
Symptoms (PARS)	N =	(142)	(66)	(69)
		.30**	.43***	.17
Role Disturbance (PARS)	N =	(141)	(66)	(72)
		.32***	.14	.35**
Burden Scale	N =	(135)	(68)	(71)
		.46***	.35**	.26**

*P $\leq$ .05 one-tailed tests

**P $\leq$ .01

***P $\leq$ .001

For inpatients, the correlation between contact and summary distress (POMS) is $r = .40$, $p \leq .05$; for outpatients, $r = .19$, $p \leq .05$. This could be interpreted as the result of the significant other needing to supervise a highly disturbed client. However, when statistically controlling for the client's symptomotology and social functioning (PARS symptoms and role skills), the original associations remain essentially unchanged ($r = .40$ for inpatients; $r = .17$ for outpatients).

Another interpretation of this association is that the significant other is distressed because of the amount of contact he has with the client. However, when partialling out the amount of contact, there is still a significant association between distress in the significant other and distress in the client. For outpatients ($n = 104$), summary mood disturbance is correlated with the PARS symptom score $r = .30$, $p \leq .001$, and role skills $r = .24$, $p \leq .01$. For inpatients the sample is too small ($n = 19$) to give significant results but the effect of the partialling is minimal. For symptoms the correlation shifts from $r = .32$ to $r = .29$; for role skills $r = .28$ becomes $r = .23$. Thus, the basic correlation between significant other disturbance and contact is relatively unchanged when partialling for either client disturbance or amount of contact. This indicates that for the significant other contact is associated with distress regardless of the amount of contact or the amount of client disturbance. One interpretation of this finding is that more highly disturbed significant others spend more time in face-to-face contact with clients. This is congruent with the finding of Brown et al. (1972) that high contact can have deleterious consequences for

the client. This is not surprising if the more disturbed significant others choose to spend more time with the clients.

Hypothesis 2: Distress in the significant other will be causally predominant in the resurgence of client problems.

Hypothesis 2 was tested on a sample of outpatients. Data were available on 50 outpatients for the intake-six month interval, 36 for the initial-three month interval, and 37 in the three-six month interval. There was not a sufficient sample to test this hypothesis on inpatients, due to difficulties in getting information from significant others and the necessity of using only complete data sets for the cross-lagged panel analysis.

The cross-lagged panel analysis of the data tends to confirm the hypothesis that it is the significant other who has the stronger impact on the client's disturbance. This analysis of the differences in cross-lagged correlations reveals 26 significant findings in the hypothesized direction. In contrast, there are only four findings of the same magnitude in the opposite direction. These findings implicate the significant other causally in the client's obsessive-compulsiveness, interpersonal insensitivity, additional psychopathology (BSI), anxiety (PARS), anger, suicidal concern, inattention to children, and upsetting others at home.

This trend is evident at all three intervals: intake-three months, three months-six months, and intake-six months. The findings are strongest in the intake-six month interval, perhaps in part because this interval has the largest sample size. The longer interval may also show more significant relationships because the interaction between client and significant other is cumulative.

Intake-Six Month Interval

While only 4 percent of the individual cross-lagged correlations are statistically significant, t-tests of the differences between the cross-lagged correlations reveal 16 significant findings. Thus, 10 percent of the t-tests are statistically significant, twice what could be expected by chance. The strength of these findings are reinforced by the fact that there were only two findings of equal magnitude in the opposite direction. Thus, 88 percent of the significant findings are in the hypothesized direction. These findings are contained in Table 2.

Specifically, tension in the significant other appears causally predominant in the report of total burden, anxiety, suicidal concern, and the report of others upset in the home. Depression in the significant other appears causally predominant in the report of client obsessive-compulsiveness, interpersonal insensitivity, and suicidal concern. Similarly, fatigue in the significant other is associated with anxiety in the client. The total mood disturbance in the significant other appears causally predominant in the report of obsessive-compulsiveness, suicidal concern, and others being upset in the home.

Three Month-Six Month Interval

The data from this interval tend to confirm the findings from the full six month interval. Of the individual cross-lagged correlations, 10 percent are significant at the $p \leq .05$ level and t-tests of the differences between the cross-lagged correlations reveal 8 significant findings in the predicted direction. Thus, 5 percent of the t-tests are statistically significant, a rate which could be achieved by chance.

Table 2. T-tests of the Differences in Cross-lagged Correlations Intake-Six Month Interval

Client Variables	Significant Other Variables				
	Tension	Depression	Anger	Fatigue	Mean
(BSI)					
Somatization	-.678	-1.247	-.881	.165	.889
Obsessive-Compulsive	-.864	-1.736*	-1.800*	.230	-1.690*
Interpersonal Sensitivity	-.753	-.463	-1.817*	-.159	-1.589
Depression	.336	.244	-.372	.772	-.085
Anxiety	-.283	-1.228	-1.007	-.710	-1.181
Hostility	1.250	.252	1.341	2.973*	1.274
Phobic Anxiety	-.657	-1.506	-1.554	-.191	1.306
Paranoid Ideation	.266	.070	-.955	1.005	-.359
Psychoticism	.395	.278	-.871	.197	-.310
Additional Items	-.895	-1.058	-.476	-.706	-1.108
Summary Index	-.162	-.845	-.996	.478	-.846
(PARS)					
Interpersonal Involvement	-1.018	.344	.265	-.367	-.094
Depression	-.641	-1.537	-1.352	-.165	-1.201
Anxiety	-1.818*	-1.162	.389	-2.458**	-1.222
Confusion	-.426	.007	-.392	.334	-.361
Alcohol/Drug Abuse	1.612	.959	1.992*	.876	1.407
Household Management	.101	.225	.759	1.060	.462
Relationship to Children	-.976	-.265	-.444	-.763	-.594
Outside Social	-.479	-.655	-.402	-.492	-.562
Employment	.616	.582	.951	.936	.917
Symptom Score	-.923	-.214	-.652	-.228	-.760
Role Skills	-.549	-.218	-.798	-.507	-.625
(Burden Scale)					
Anger	-1.547	-.810	-.844	-.251	-1.076
Suicidal Concern	-1.974*	-1.381	-1.943*	-1.008	-1.773*
Financial Burden	-.906	-.766	-1.107	-.072	-.795
Children Upset	-.865	-.664	-1.002	-.174	-.884
Attention to Children	-1.347	-1.769*	-.793	-.627	-1.250
Others Upset	-2.464*	-1.940	-1.935*	-.672	-2.244*
Duties Neglected	-.260	-.411	-.004	.369	.037
Activities Interrupted	-.998	-.956	-.705	.089	-.787
Summary Burden	-1.685*	-.212	-.277	.677	-.411

* $P \leq .05$, one tailed test

** $P \leq .01$

However, the pattern of these findings are by no means random. In fact, 80 percent of the significant findings are in the hypothesized direction. There are only two findings opposing this trend. The results of this analysis are contained in Table 3.

Specifically, summary distress, depression, anger, and fatigue in the significant other appear causally predominant in the report of anger in the client. Even more striking is the finding that summary distress, depression, and anger in the significant other causally predominate in the report of suicidal concerns about the client. Fatigue in the significant other appears causally predominant in the elevation of the additional item scale on the BSI.

There are two associations of the same magnitude which are in the opposite direction than predicted: client hostility and poor household management to tension in the significant other.

Intake-Three Month Interval

The data from this interval are consistent with the overall pattern of findings but at a lower level of association. The data reveal two significant findings: tension and fatigue in the significant other appear causally predominant in the resurgence of client anxiety. The fact that this level of association is lower than in the 3-6 month interval suggests that the strength of the causal relationship increases over time (see Table 4).

Hypothesis 3: Family burden for inpatients will be higher than for outpatients.

This hypothesis was tested by comparing the BSI, PARS, and Burden Scale scores on a sample of 238 outpatients and 38 inpatients. The data

Table 3. T-tests of the Differences in Cross-lagged Correlations Three-Six Month Interval

Client Variables	Significant Other Variables				
	Tension	Depression	Anger	Fatigue	Mean
(BSI)					
Somatization	2.581	.656	1.085	1.984	1.308
Obsessive-Compulsive	.361	-.166	-.373	-.484	-.429
Interpersonal Sensitivity	.381	-.522	-1.222	-.529	0.920
Depression	.046	-.049	-.411	-1.063	-.811
Anxiety	1.365	.436	1.224	-.022	.706
Hostility	1.851*	1.232	.403	1.158	.819
Phobic Anxiety	-.361	-.747	-.207	-1.253	-1.236
Paranoid Ideation	.693	-.104	-1.076	-.036	-.527
Psychoticism	.436	-.192	-.590	-.598	-.663
Additional Items	.222	.431	.890	-2.368*	.150
Summary Index	.903	.086	-.051	-.461	-.208
(PARS)					
Interpersonal Involvement	1.066	1.109	1.378	.484	.947
Depression	.817	-.256	-.011	1.020	.471
Anxiety	.478	.718	.645	-.011	.589
Confusion	.130	-.655	-1.069	-.352	-.837
Alcohol/Drug Abuse	-.912	-1.628	-.786	-.870	-1.208
Household Management	1.691*	1.070	1.263	.799	1.399
Relationship to Children	.644	.553	.551	.055	.496
Outside Social	.863	.259	.480	.051	.509
Employment	1.021	1.144	.604	-.164	.763
Symptom Score	.756	.367	.225	.396	.317
Role Skills	-1.231	-.685	-.774	-.604	-1.034
(Burden SCale)					
Anger	-1.097	-2.253*	-2.182*	-1.903*	-2.290*
Suicidal Concern	-1.450	-2.615*	-2.447*	-1.401	-2.301
Financial Burden	.061	-.617	-.352	-.658	-.424
Children Upset	.523	.755	.036	-.128	.065
Attention to Children	-.530	-.358	.415	-.397	-.196
Others Upset	.756	-.641	.600	.498	.379
Duties Neglected	-.630	-.396	-.373	-.417	-.647
Activities Interrupted	1.160	1.459	1.340	1.263	1.393
Summary Burden	-.076	-.653	-.404	-.516	-.582

*$P \leq .05$, one-tailed test.

Table 4. T-tests of the Differences in Cross-lagged Correlations Intake-Three Month Interval

Client Variables	Significant Other Variables				
	Tension	Depression	Anger	Fatigue	Mean
(BSI)					
Somatization	-.086	.365	1.032	-.418	.337
Obsessive-Compulsive	.179	-1.184	-.609	.402	-.631
Interpersonal Sensitivity	.351	.715	1.262	-.378	.598
Depression	.493	-.395	-.437	.067	-.240
Anxiety	.167	-.132	-.283	-.593	-.524
Hostility	.767	.445	.111	.713	.262
Phobic Anxiety	1.121	1.507	1.344	.831	1.170
Paranoid Ideation	-.121	.327	.473	-.228	.085
Psychoticism	.226	.021	.180	.079	.110
Additional Items	-1.061	.210	-.235	-1.200	-.571
Summary Index	.256	.114	.238	-.088	-.004
(PARS)					
Interpersonal Involvement	-.730	.407	-.173	-.039	.093
Depression	-.263	-.299	-.635	-.088	-.414
Anxiety	-2.183*	1.387	.768	-1.804*	-.102
Confusion	.441	.183	.148	.589	.402
Alcohol/Drug Abuse	-.562	-.438	-1.469	.504	-.674
Household Management	-.936	-.057	-.443	.081	-.315
Relationship to Children	-.268	.075	.157	.077	.182
Outside Social	-1.008	-.094	-.629	-.507	-.465
Employment	-.867	-.694	-.473	-.267	-.589
Symptom Score	-.071	.229	-.172	.074	.101
Role Skills	1.344	.404	1.277	1.050	1.179
(Burden Scale)					
Anger	.647	.802	.802	1.381	1.148
Suicidal Concern	-.692	-.572	.048	.410	-.184
Financial Burden	-.686	-.948	-.703	-.264	-.627
Children Upset	-.346	-.902	-.173	.602	-.179
Attention to Children	-.750	-.816	-.486	-.114	-.563
Others Upset	-1.316	-.519	-.132	-.750	-.593
Duties Neglected	-.692	-1.006	-.300	.777	-.284
Activities Interrupted	-1.095	-1.562	-.764	-.327	-.895
Summary Burden	-.292	.342	-.068	.372	.198

*P $\leq$ .05, one-tailed test.

show that inpatients score significantly worse on the BSI summary index, PARS symptom and role skills summary scores, and the summary burden score. Thus, the level of burdensome behaviors is clearly higher in inpatients. These findings are reported in Table 5.

The difference in the level of burdensome behaviors, however, does not correspond clearly to a difference in generalized distress in the significant others. In comparing inpatient and outpatient samples, distress in the significant others of inpatients was indicated by the highly elevated burden items: worry about suicide, the patient upsetting the children and others in the family ($p = .001$), interference with family activities ($p = .01$), and requiring others to take on extra duties ($p = .05$). In spite of these indications of burden, however, the POMS did not reveal significantly more distress in the significant others of inpatients in comparison to outpatients.

In summary, Hypothesis 3 is partially supported in that family burden (social functioning, elevated symptoms, and family burden items) is higher for inpatients than outpatients. However, in spite of these findings indicating a higher level of burdensome behaviors for inpatients, the difference between inpatients and outpatients was not discernable in the reported mood states (POMS) of the significant other. This suggests that the linkage between the level of burdensome behaviors and distress in the significant other is not invariant. The importance of mediating variables and family type are discussed in Hypotheses 4 and 5.

Table 5. Inpatient-Outpatient Differences on the BSI, PARS, and Burden Scale

Client Variable	Inpatient N	Inpatient Mean	Outpatient N	Outpatient Mean	T Value
(BSI)					
Somatization	36	1.38	235	.90	2.94**
Obsessive-Compulsive	36	1.91	235	1.46	2.65**
Interpersonal Sensitivity	36	1.90	235	1.51	1.93*
Depression	36	2.34	235	1.83	2.48**
Anxiety	36	2.14	235	1.73	2.25*
Hostility	36	1.57	235	1.25	1.73
Phobic Anxiety	36	1.31	235	.92	2.34*
Paranoid Ideation	36	1.73	235	1.32	2.27*
Psychoticism	36	1.94	235	1.30	3.93***
Additional Items	36	2.20	235	1.51	3.62***
Summary Index	36	1.83	235	1.37	3.26***
(PARS)					
Interpersonal Involvement	38	14.10	235	11.37	4.70***
Agitated Depression	35	15.80	237	12.78	4.34***
Anxiety	13	10.94	75	9.59	1.50
Confusion	37	14.75	231	10.85	5.68***
Alcohol/Drug Abuse	36	7.60	233	6.09	2.64**
Relationship to Children	20	10.21	133	12.38	3.11**
Outside Social	35	5.78	224	7.17	3.02**
Employment	21	6.14	134	7.79	2.72**
Symptom Score	38	14.50	238	11.51	6.23***
Role Skills	36	8.03	235	10.14	4.18***
(Burden Scale)					
Anger	38	2.81	238	2.26	3.28***
Suicidal Concern	38	2.31	238	1.60	4.05***
Financial Burden	38	1.74	238	1.46	1.52
Children Upset	38	2.21	238	1.54	3.02**
Attention to Children	38	1.44	238	1.16	1.64
Others Upset	38	2.84	238	2.16	3.29***
Duties Neglected	38	1.97	237	1.53	2.43*
Activities Interrupted	37	2.24	237	1.55	3.84***
Summary Burden	37	2.44	231	1.84	5.13***

*P $\leq$ .05, one tailed tests
**P $\leq$ .01
***P $\leq$ .001

Hypothesis 4: Clients in parental families will show lower social functioning than clients in conjugal families.

This hypothesis was tested by comparing PARS scores on a sample (inpatients and outpatients) of 90 conjugal families and 39 parental families. Clients from parental families show significantly more combined symptoms ($p = .04$), depression ($p = .04$), confusion ($p = .02$), and work impairment ($p = .03$). These data support the conclusion that clients from parental families show more symptomatic distress and poorer social functioning (see Table 6). This is consistent with previous research findings (Freeman and Simmons, 1963).

Hypothesis 5: Clients in conjugal families will have significant others who report more distress than those in parental families.

This hypothesis was tested by comparing POMS scores on a sample (inpatients and outpatients) of 59 conjugal and 17 parental families. T-test results are contained in Table 7.

In conjugal compared to parental families, significant others report higher mood disturbance on four out of the five POMS scales: summary mood disturbance, tension, depression, and anger ($p = .01$). Thus, while conjugal families report higher social functioning and less symptomatic distress in the client (Hypothesis 4), these same significant others report feeling significantly more summary mood disturbance, tension, depression, and anger. It appears that a spouse is far more vulnerable than a parent to the client's disturbance.

Table 6. Differences in Client Functioning in Parental and Conjugal Families

Client Variables	Conjugal N	Conjugal Mean	Parental N	Parental Mean	T Value
(PARS)					
Interpersonal Involvement	90	12.10	39	12.26	-.24
Agitated Depression	90	12.32	36	13.74	-1.81*
Anxiety	36	10.24	15	9.80	.48
Confusion	90	10.78	36	12.48	-2.18*
Alcohol/Drug Abuse	90	6.29	38	5.79	.80
Relationship to Children	52	11.42	19	12.35	-1.07
Outside Social	88	6.78	35	6.81	-.07
Employment	59	7.78	15	6.40	1.92*
Symptom Score	90	11.56	39	12.57	-1.84*
Role Skills	89	9.54	38	9.34	-.17

* $P \leq .05$, one-tailed test

Table 7. Distress in Significant Others: A Comparison of Parental and Conjugal Families

Significant Other Variables	Conjugal N	Conjugal Mean	Parental N	Parental Mean	T Value
(POMS)					
Tension	59	1.19	17	.72	3.17***
Depression	59	.94	17	.49	2.64**
Anger	59	.96	17	.45	3.14***
Fatigue	58	1.08	17	.78	1.30
POMS Mean	59	1.03	17	.57	3.09***

*P $\leq$ .05, one tailed tests
**P $\leq$ .01
***P $\leq$ .001

DISCUSSION

What do the data from this study tell us about the relationship between clients and their significant others? A basic finding is that distress in the significant other is clearly correlated with client symptomatic disturbance and social functioning.

Traditionally, the concept of family burden has been used to explain this association between distress in the client and the significant other. The reasoning is that client disturbance creates a burden on the family, thereby accounting for the association between client disturbance and disturbance in the significant other. While earlier studies have tended to equate client symptomotology with family burden, the data from this study suggest that there are important variables which mediate the linkage between client symptoms and distress in the significant other.

Some of the complexity of unraveling the association between distress in the client and significant other is illustrated by the analysis of differences between inpatients and outpatients. Inpatients were rated to have significantly more symptoms and poorer social functioning. Significant others reported more concerns about inpatients on the family burden scale. Nevertheless, there were no statistically significant differences in the overall level of mood disturbance (POMS) of the significant others of inpatients and outpatients.

The discrepancy between the results of the POMS and the other instruments can be interpreted in at least two ways. The discrepancy can be attributed to differences in the sensitivity of the instruments. The burden scale may simply be more sensitive than the POMS since it taps specific concerns and worries related to the client. Alternatively, it may be that the degree to which specific client symptoms have a generalized impact on the mood of the significant other, as measured by the POMS, is mediated by other variables.

The latter interpretation, that other variables may influence the linkage between client symptoms and generalized mood disturbance in the significant other, is supported by findings on the differences between parental and conjugal families. Clients who came from parental families showed the greater disturbance while significant others in conjugal families reported greater distress. Thus, a spouse appears to be far more vulnerable than a parent to disturbance in the client. Consequently, to understand the impact of the client's disturbance on the family (family burden), one must know not only the level of disturbance in the client but also the role relationships involved.

Analysis of the relationship between significant other distress and the amount of contact with the client raises additional problems for the traditional concept of family burden. The finding that significant other distress is correlated with client contact appears to reflect the fact that significant others who are more distressed spend more time with the client. Alternative explanations of this finding, that significant others must spend more time supervising disturbed clients or that significant others are distressed because of the amount of contact they

have with the client, were ruled out by partial correlational analysis.

The finding that it is the more disturbed significant others who spend more time with the client begins to raise the possibility that disturbed significant others actually "burden" the client. This interpretation is congruent with the findings of Brown et al. (1972) that high face-to-face contact can have deleterious consequences for the patient. This is not surprising if it is the more distressed significant others who spend more time with clients.

In conclusion, the concept of family burden, traditionally operationalized as the level of client symptoms and social functioning, may be misleading in its simplicity. The inaccuracy of equating client disturbance with significant others' disturbance is indicated by the importance of the role relationship as a mediating variable. In addition, it appears that the significant other is disturbed regardless of the amount of contact with the client, suggesting again that a more complex process is operating. Consequently, instead of equating disturbance in the client and significant other, as conceptualized in family burden, a more accurate model of client-significant other interaction would retain client disturbance and disturbance in the significant other as separate but related elements. The linkage between these elements will be influenced in important ways by other aspects of their interaction, such as their time together and role relationships.

The Question of Causality

The cross-lagged panel analysis was performed to assess the causal relationships between disturbance in the client and significant others.

Previous research on this general association has generated two competing unidirectional causal models. Research on family burden has been predicated on the model that it is the client who disturbs the family. On the other hand, some investigators (e.g., Brown et al.) have essentially argued that it is the family who disturbs the client. While these opposing models provide the historical context for the discussion of causality, the analysis in this study has not assumed that either unidirectional model is sufficient in itself.

Since, in this study, statements about causality are based on inferences made possible by the cross-lagged panel analysis, it may be useful to reiterate certain logical properties of this technique which are important for understanding the issues at hand. First, it is important to note that while the cross-lagged panel analysis tests rival causal hypotheses, it does not imply that causality is unidirectional. Rather, this statistical technique is designed to assess the predominant direction of causation, the balance of a process.

Second, cross-lagged panel analysis is concerned with causation over time, not "instantaneous" causation. The potentially considerable cause and effect interaction which occurs at any one point in time (contained in the synchronous correlations) does not enter into the cross-lagged correlations. Thus, what this technique is capable of capturing are delayed or slowed-up causal sequences which operate over time. In theory, cross-lagged panel analysis is "only possible because of real storage processes" or delaying mechanisms (Rozelle and Campbell, 1969, p. 77).

Third, as a quasi-experimental, correlational technique, cross-lagged panel analysis can never ultimately specify causal factors. Thus, if variable A appears to cause variable B, there is always the possibility that a third variable C, highly correlated with A, is actually the causal factor. This caveat is important in interpreting the findings of the statistical analysis, particularly considering the number of variables which we may presume to effect the interaction between client and significant other.

Given these logical properties, it is important to consider the consequences of using non-independent sources of data. In this study the significant other provided self-reports (POMS) as well as information on the client (PARS). The non-independence of these measures raises the possibility that, for example, a significant other who is feeling angry will tend to rate the client as angry. If this is the case, however, the contamination will effect the synchronous correlations (rx_1y_1, rx_2y_2) and not the cross-lagged correlations. Thus, the non-independent measures will increase the noise in the analysis but will not distort inferences from the cross-lagged correlations. This conclusion is substantiated by the fact that there were more significant findings from the independent BSI data, provided by the client, than from the PARS data, provided by the significant other.

The specific findings of the cross-lagged panel analysis are much less complex than the method of inference: disturbance in the significant other appears causally predominant in the exacerbation of client disturbance. The analysis of data on outpatients indicates that the significant other is causally predominant in the exacerbation of the

client's anger, suicidal concern, inattention to children, upsetting others at home, anxiety, obsessive-compulsiveness, and interpersonal insensitivity. There were twenty-six findings in this direction and only four findings of equal magnitude in the direction of the client disturbing the significant others. This level of findings is considerable, given the conservativeness of the technique and the clear directionality of the relationships.

Before discussing the implications of these findings, several qualifications must be made about their generalizability. First, since this portion of the analysis was done on outpatients only, it is unclear whether the same findings would apply to an inpatient sample. It is worth noting, however, that the outpatients in this study much more closely resemble inpatients in their level of disturbance than a non-client sample drawn from the community (LaFerriere, 1979). Second, there may be specific variables which can operate in either direction, from the client or to the client. In this sample, anger in the client appeared twice as a variable which may have been causally predominant in elevating distress in the significant other. Since anger is a powerful variable influencing the client, it would not be surprising if a replication of this analysis with a larger sample would show the client's anger to significantly impact the significant other. Third, the data for this study was collected during a specific period of time, beginning with the initiation of outpatient treatment, and cannot be assumed to be representative of client-significant other interaction at other points in time.

Even with these necessary qualifications, there remains a significant body of findings which can be integrated with theories of family functioning. But before turning to specific explanations of these findings, it may be useful to translate the statistical concept of "causal predominance" into the language of family interaction. One possible conceptual model, which combines the process of interaction with the theoretical construct of power, is provided by social exchange theory. There are suggestive parallels between cross-lagged panel analysis, which infers causal predominance over time, and theories of social exchange, which infer power from the transactional outcomes of on-going relationships. A social exchange conception of power (Parsons, 1969) does not assume that power resides in traits or persons but that it must be inferred from the exchange of resources which characterize dynamic relationships. As a characteristic of family interaction, power involves a reciprocal process in which both participants have power over, yet are dependent upon, one another (Beckman-Brindley and Tavormina, 1978). The balance of this process over time corresponds to the "causal predominance" inferred in cross-lagged panel analysis.

It should be clear that the cross-lagged panel analysis of the data in this study allows inferences about the outcome of a transactional process but it does not provide information about the mechanisms of the processes involved. However, speculations are possible with respect to both the situations and processes which may be involved.

We suggest that the findings of this study can be explained theoretically at two levels of analysis. The first assumes that the causal interaction occurs in a dyad consisting of the client and his significant

other. The second assumes that the causal interaction occurs in a larger family group. While a lack of data on family composition prohibits choosing between these explanations, they are congruent with the data and each other.

Assuming first that the causal events occur within the dyadic interaction of the client and significant other, the finding to be explained is why the significant other appears to have a more powerful influence on the client. The power involved here is peculiar in that it does not involve making specific decisions or enforcing sanctions but rather in making the client more disturbed. One possible interpretation of the significant other's effectiveness in transmitting his distress lies in the relative ineffectiveness of the client in maintaining ego boundaries. Within the relational system, it may be that the client's boundaries are so weak that he has difficulty maintaining separateness from the distress experienced by the significant other. Difficulties in maintaining ego boundaries often characterize disturbed relationships (Bowen, 1971; Boszormenyi-Nagy, 1965) and the person with the weaker boundaries may become the more disturbed and, consequently, be designated as the client. If one were to frame this process within a decision making paradigm of power transactions, the decisions made within the relational system are about who experiences the distress and who becomes the identified client.

A related interpretation of the relative strength of the significant other is derived from the logic of cross-lagged panel analysis. Because cross-lagged panel analysis detects differences in delayed causal sequences which are dependent on real storage processes, the data

may reflect an interactional pattern in which the client internalizes (stores) the negative aspects of his interaction with the significant other. Specifically, in angry interchanges between client and significant others, the client may be more likely to accept attacks as valid and be less likely to mount an effective defense. The negative affect remains within the client and his distress increases. In contrast, the significant other may be less likely to accept attacks as valid and be more effective in continuing the exchange. The significant other internalizes less of the negative affect and is less disturbed at the end of these exchanges.

While the on-going exchange between client and significant other is contained in the synchronous correlations and cannot be detected from the cross-lagged correlations, the outcomes, the relative degree of internalized distress, can be detected over time. Thus, the apparent strength of the significant other and the relative ineffectiveness of the client may reflect different styles of processing negative interactions. As the internalized negative affect accumulates in the client, the impact of the significant other becomes more evident with the passage of time. This is precisely the pattern displayed in the data.

Within the dyad of client and significant other, therefore, there are at least two possible and related explanations of the significant other's apparent strength. First, the client may have considerable problems maintaining ego boundaries, making it difficult to remain separate from the disturbance of the significant other. Consequently, the client is relatively vulnerable to the significant other's disturbance. Second, the relative strength of the significant other and client

may derive from different styles of processing negative interactions. The client may be more likely to internalize negative affects, the accumulation of which are detected in the cross-lagged panel analysis. Both of these explanations may also be conceptualized as decisions within the dyadic system as to who will feel the disturbance and who will be identified as the client.

Another possible explanation of these findings emerges when one moves beyond the dyadic relationship. Very simply, the significant other's feelings may be powerful because they are representative of a larger family group. While data are not available on the other family members, it is at least plausible that the significant other articulates feelings shared by others in the family. Thus, the causal sequence could be that the family's attitudes and feelings, as articulated by the significant other, are stronger than the client. While this formulation is only conjectural, given the limitations of the data, it is congruent with the data and a large body of literature on group and family processes. The family group is simply stronger than the individual.

In summary, there are several plausible explanations for the relative strength of the significant other in interaction with the client. Within the dyad, the client may have weaker ego boundaries and be more likely to internalize negative aspects of interaction with the significant other. Within a larger family group, the significant other may articulate feelings for a number of persons important to the client. In this situation, the relative weakness of the client becomes very

understandable. These interpretations, while conjectural, are compatible with each other and the data.

Implications for Research

An important implication of this study is that the notion of family burden is conceptually inadequate and may be misleading is understanding the relationship between client and family. This is not to deny that a great deal of suffering occurs in these families but is to say that the concept of family burden contains unfounded assumptions about the origin of that pain. Specifically, research on family burden has assumed that client symptomatic distress can be equated with family burden and, more important, that the client unilaterally burdens the family. These assumptions can only impede meaningful research on the experiences of these families.

The findings of the present study would strongly suggest the utility of a more broadly transactional model of the relationship between the client and family. Clearly, a unidirectional model of the client burdening the family must be abandoned, given the much clearer evidence for the burden of the family on the client.

Within a transactional model, the findings of this study suggest several fairly specific research strategies. First, instead of assessing client symptoms which are presumed to burden the family, the investigator needs to assess which aspects of the client's behavior do, in fact, disturb the family member. There may be relatively healthy aspects of the client's interpersonal style which are more disturbing to the family than symptoms. Conversely, there may be client behaviors,

measured as symptoms, which are entirely congruent with family norms.

Second, to genuinely understand both sides of the interaction, it will be necessary to assess which behaviors in the significant others are disturbing to the client. The present study only measured mood states in the significant other, an approach which left attitudes and behaviors untapped. Clearly, it is the relationship between client and significant other which must be directly assessed.

Third, it is unclear at this point whether the attitude and feelings of the principal respondent, the significant other, are representative of the family group. It seems likely that information gathered from all family members would further clarify the significant influences on the client.

Fourth, the present study highlights the importance of family type (parental vs. conjugal) on the relationship between significant other and client variables. The sample size in this study prohibited a separate cross-lagged panel analysis of parental and conjugal families but it is not inconceivable that the direction of effects may vary according to family type. For example, in a parental family the client may be more vulnerable than in a conjugal family. Analysis by different diagnostic groups could also reveal new results, as could a separate analysis of inpatients.

Finally, it may be time to move beyond the question of whether the client or significant other has the greater effect to a more refined question of <u>how</u> they effect one another. Indirect studies of the client and significant other, as in Brown et al. and the present study, reveal influences from the significant other but not from the client.

While the significant other may be causally predominant in this interaction, the client must make some contribution to the interaction as well. An observational analys is the next logical step in understanding the interaction of the client and his significant others.

Implications for Treatment

The implication of this study for treatment is straightforward: effective treatment must take into account a potentially deleterious interaction between the client and his significant others. To ignore this fact is to ignore an important variable in the process by which the client improves or deteriorates. The most effective intervention for these clients must include some form of intervention to modify destructive relationships with significant others. Family therapy would appear to be a plausible approach to this problem.

The choice of specific treatment techniques in these cases remains an empirical issue. Nevertheless, the results of this study suggest the importance of the fact that the significant other can be causally predominant in the resurgence of client symptomatic distress and a deterioration of social functioning.

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APPENDIX

RESEARCH INSTRUMENTS

RESEARCH INSTRUMENTS

The research instruments used in this study and contained in this appendix are as follows: The Brief Symptom Inventory (BSI), the Personal Adjustment and Roles Skills Questionnaire (PARS), and the Profile of Mood States (POMS), which is contained on the last page of the PARS. The Family Burden scale is composed of the items 60-67, which are inserted in the PARS. Also, the Appendix contains a sample consent form used in this study.

B.S.I.*

INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have. Read each one carefully and decide how much that problem bothered you during the past week, including today. Circle the number under the column heading that best describes how much that problem bothered you. For example, the first problem is "Nervousness or shakiness inside." If you have been bothered by that problem a little bit during the last week, you would circle 2 under the second column. Please do not skip any items. If you change your mind, erase the first mark completely. If you have any questions, please ask the secretary.

During the past week, how much were you bothered by:	Not At All	A Little Bit	Moderately	Quite A Lot	Extremely
1. Nervousness or shakiness inside	0	1	2	3	4
2. Faintness or dizziness	0	1	2	3	4
3. The idea that someone else can control your thoughts	0	1	2	3	4
4. Feeling others are to blame for most of your troubles	0	1	2	3	4
5. Trouble remembering things	0	1	2	3	4
6. Feeling easily annoyed or irritated	0	1	2	3	4
7. Pains in heart or chest	0	1	2	3	4
8. Feeling afraid in open spaces	0	1	2	3	4
9. Thoughts of ending your life	0	1	2	3	4
10. Feeling that most people cannot be trusted	0	1	2	3	4
11. Poor appetite	0	1	2	3	4
12. Suddenly scared for no reason	0	1	2	3	4
13. Temper outbursts you could not control	0	1	2	3	4
14. Feeling lonely even when you are with people	0	1	2	3	4
15. Feeling blocked in getting things done	0	1	2	3	4
16. Feeling lonely	0	1	2	3	4
17. Feeling blue	0	1	2	3	4
18. Feeling no interest in things	0	1	2	3	4
19. Feeling fearful	0	1	2	3	4
20. Your feelings being easily hurt	0	1	2	3	4
21. Feeling that people are unfriendly or dislike you	0	1	2	3	4
22. Feeling inferior to others	0	1	2	3	4
23. Nausea or upset stomach	0	1	2	3	4
24. Feeling that you are watched or talked about by others	0	1	2	3	4
25. Trouble falling asleep	0	1	2	3	4
26. Having to check and double-check what you do	0	1	2	3	4

During the past week, how much were you bothered by:	Not At All	A Little Bit	Moderately	Quite A Lot	Extremely
27. Difficulty making decisions	0	1	2	3	4
28. Feeling afraid to travel on buses, subways, or trains	0	1	2	3	4
29. Trouble getting your breath	0	1	2	3	4
30. Hot or cold spells	0	1	2	3	4
31. Having to avoid certain things, places or activities because they frighten you	0	1	2	3	4
32. Your mind going blank	0	1	2	3	4
33. Numbness or tingling in parts of your body	0	1	2	3	4
34. The idea that you should be punished for your sins	0	1	2	3	4
35. Feeling hopeless about the future	0	1	2	3	4
36. Trouble concentrating	0	1	2	3	4
37. Feeling weak in parts of your body	0	1	2	3	4
38. Feeling tense or keyed up	0	1	2	3	4
39. Thoughts of death or dying	0	1	2	3	4
40. Having urges to beat, injure or harm someone	0	1	2	3	4
41. Having urges to break or smash things	0	1	2	3	4
42. Feeling very self-conscious with others	0	1	2	3	4
43. Feeling uneasy in crowds	0	1	2	3	4
44. Never feeling close to another person	0	1	2	3	4
45. Spells of terror or panic	0	1	2	3	4
46. Getting into frequent arguments	0	1	2	3	4
47. Feeling nervous when you are left alone	0	1	2	3	4
48. Others not giving you proper credit for your achievements	0	1	2	3	4
49. Feeling so restless you couldn't sit still	0	1	2	3	4
50. Feelings of worthlessness	0	1	2	3	4
51. Feeling that people will take advantage of you if you let them	0	1	2	3	4
52. Feelings of guilt	0	1	2	3	4
53. Idea something is wrong with your mind	0	1	2	3	4

DMH FORM NO. 1641R

Agency Use Only:

A.N. ____

C.C.N. ____

N.Q. ____

N.A. ____

Date Comp. ____

PERSONAL ADJUSTMENT AND ROLES SKILLS QUESTIONNAIRE*

INSTRUCTIONS: Please describe the person's community adjustment during the past month by answering each question below. Mark your answer to each question by circling the number under your answer choice. For example, in question #1, if the person you are rating has shown consideration for you "often" during the last month, you would circle 3 under the heading "often."

Please answer each statement below.

DURING LAST MONTH, HAS HE/SHE . . .	Rarely	Sometimes	Often	Always
1. Shown consideration for you.	1	2	3	4
2. Felt close to members of household.	1	2	3	4
3. Discussed important matters with you.	1	2	3	4
4. Been able to talk it through when angry.	1	2	3	4
5. Cooperated (gone along) when things asked of him or her.	1	2	3	4
6. Shown interest in what you say.	1	2	3	4
7. Shown affection toward you.	1	2	3	4
8. Gotten along with other family members.	1	2	3	4

DURING LAST MONTH, HAS HE/SHE . . .	Never	Rarely	Sometimes	Often
9. Said people don't care about him, her.	1	2	3	4
10. Said people treat him/her unfairly.	1	2	3	4
11. Complained or worried about problems.	1	2	3	4
12. Said people try to push him/her around.	1	2	3	4
13. Said life wasn't worth living.	1	2	3	4
14. Said things looked discouraging or hopeless.	1	2	3	4
15. Talked about being afraid.	1	2	3	4

DURING LAST MONTH, HAS HE/SHE . . .	Almost Never	Sometimes	Often	Almost Always
16. Had difficulty eating (poor appetite, indigestion, etc.)	1	2	3	4
17. Been nervous.	1	2	3	4
18. Acted restless and tense.	1	2	3	4
19. Had difficulty sleeping.	1	2	3	4

DURING LAST MONTH, HAS HE/SHE . . .	Never	Rarely	Sometimes	Often
20. Jumped from one subject to another when talking.	1	2	3	4
21. Just sat and stared.	1	2	3	4
22. Forgotten to do important things.	1	2	3	4
23. Been in a daze or confused.	1	2	3	4
24. Needed supervision or guidance.	1	2	3	4
25. Lost track of time.	1	2	3	4
26. Seemed to be off in another world.	1	2	3	4

DURING LAST MONTH, HAS HE/SHE . . .	Never	Rarely	Sometimes	Often
27. Been drinking alcohol to excess.	1	2	3	4
28. Been using drugs excessively.	1	2	3	4
29. Become drunk on alcohol or high on drugs.	1	2	3	4
30. Had a drinking or drug problem that upset family.	1	2	3	4
31. Had a drinking or drug problem that interfered with working.	1	2	3	4

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DURING LAST MONTH, HAS HE/SHE . . .

		Almost Never	Some-times	Often	Almost Always
32.	Done chores around house.	1	2	3	4
33.	Done household cleaning.	1	2	3	4
34.	Prepared meals for the family.	1	2	3	4
35.	Done laundry, ironing or mending.	1	2	3	4
36.	Done grocery shopping.	1	2	3	4

37. Are there usually children in the home? (Mark one)
(1) _____ No (If "no," skip to question 44)
(2) _____ Yes (If "yes," answer questions 38-43)

DURING LAST MONTH, HAS HE/SHE . . .

		Almost Never	Some-times	Often	Almost Always
38.	Spent time with the children.	1	2	3	4
39.	Shown affection toward the children.	1	2	3	4
40.	Kept promises to the children	1	2	3	4
41.	Been consistent in reacting to the children.	1	2	3	4
42.	Known right thing to do when disciplining children.	1	2	3	4
43.	Had children show respect for him/her.	1	2	3	4

DURING LAST MONTH, HAS HE/SHE . . .

44. Been involved in activities outside the home? (Mark one)
(1) _____ Stayed at home this past month.
(2) _____ Rarely involved outside the home.
(3) _____ Involved in some outside activities.
(4) _____ Often involved in outside activities.

DURING LAST MONTH, HAS HE/SHE . . .

45. Attended meetings of civic, church or other organizations? (Mark one)
(1) _____ Did not attend any meeting this past month.
(2) _____ Rarely attended meetings.
(3) _____ Sometimes attended meetings.
(4) _____ Often attended meetings.

46. Participated in recreational activities outside the home? (Mark one)
(1) _____ No recreational activities outside home.
(2) _____ Rarely participated in outside recreation.
(3) _____ Sometimes participated.
(4) _____ Often participated.

47. Been employed outside the home? (Mark one)
(1) _____ Unemployed last month (skip to question 51)
(2) _____ Employed part time last month.
(3) _____ Employed full time last month.
Note: If employed part or full time, please answer questions 48-50.

48. About how much take home pay did he/she earn from working last month? (Do not include money from pension or welfare)
(1) _____ Earned little or no money last month.
(2) _____ Earned less than $100 per week.
(3) _____ Between $100 and $200 per week.
(4) _____ Over $200 per week from working.

49. From working, did he/she earn an adequate amount of money last month?
(1) _____ Earned no money by working last month.
(2) _____ Earned enough to take care of personal needs.
(3) _____ Earned enough to partially support a family.
(4) _____ Earned enough to adequately support a family.

50. Did he/she look forward to going to work each day? (Mark one)
(1) _____ Not employed last month.
(2) _____ Rarely looked forward to work.
(3) _____ Sometimes looked forward to work.
(4) _____ Usually looked forward to work.

DVH FORM NO. 1941R

NOTE: QUESTIONS 51-65 ASK THAT YOU INDICATE WHETHER CERTAIN AREAS OF ADJUSTMENT CAUSED PROBLEMS FOR THE PERSON YOU ARE RATING DURING THE PAST MONTH. PLEASE BE SURE TO ANSWER EACH QUESTION BELOW.

DURING THE PAST MONTH, HAS HE/SHE HAD PROBLEMS . . .

51. a. Talking and relating to you and people close with him or her?
(1) ___ No problems.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

52. a. Feeling bad about self or being angry with others?
(1) ___ No problems.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

53. a. Being nervous, not sleeping or eating well?
(1) ___ No problems.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

54. a. Forgetting things, being confused?
(1) ___ No problems.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

55. a. Using alcohol or drugs to excess?
(1) ___ No problems.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

56. a. Doing household chores, laundry, cooking, cleaning, shopping?
(0) ___ Not expected.
(1) ___ No problem.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

57. a. Relating to children in the home?
(0) ___ No children home.
(1) ___ No problem.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

58. a. Getting involved in outside social activities?
(0) ___ Not expected.
(1) ___ No problem.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

59. a. Earning money from working?
(0) ___ Not expected.
(1) ___ No problem.
(2) ___ Some problems.
(3) ___ Serious problems.
b. If this is a problem, is it . . .
Getting worse ___ Getting better ___ No change ___

HAS THE PERSON YOU ARE RATING RAISED THE FOLLOWING PROBLEMS FOR THE FAMILY DURING THE LAST MONTH? (Circle the number under your answer)

	Not at all	A little bit	Quite a bit	A great deal
60. Has she/he been irritable or angry?	1	2	3	4
61. Have you been worried he/she might hurt themself?	1	2	3	4
62. Have his/her problems CAUSED a drain on the family's finances?	1	2	3	4
63. Have any children in the family been upset BECAUSE of his/her problems (e.g., angry, frightened, sad)?	1	2	3	4
64. Have any children in the family not gotten enough attention BECAUSE OF his/her problems?	1	2	3	4
65. Have you or any other adult in the family been more upset than usual BECAUSE of his/her problems?	1	2	3	4
66. Have you or anyone else in the family taken over extra duties BECAUSE of his/her problems?	1	2	3	4
67. Have his/her problems INTERFERED with your family's activities?	1	2	3	4

PLEASE COMPLETE THE FOLLOWING BACKGROUND QUESTIONS:

68. How often did you see this person during the last month?
(1) ___ Not at all.
(2) ___ Once or twice during past month.
(3) ___ About once a week.
(4) ___ About 3 to 5 times a week.
(5) ___ Saw daily.
(6) ___ Saw daily for 5 or more hours daily.

69. What is your relationship to the person you are rating?
(1) ___ Spouse or mate.
(2) ___ Parent.
(3) ___ Other relative (sister, aunt, etc.)
(4) ___ Friend.

Today's Date _____

(OVER)

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We would also like to know how you have been feeling. Below is a list of words that describe feelings people sometimes have. Please read each one carefully. Then circle the number to the right which best describes HOW YOU HAVE BEEN FEELING DURING THE PAST WEEK INCLUDING TODAY.

During the last week, have you felt:		Not at all	A little	Moderately	Quite a bit	Extremely
1.	Tense	0	1	2	3	4
2.	Angry	0	1	2	3	4
3.	Worn out	0	1	2	3	4
4.	Unhappy	0	1	2	3	4
5.	Sorry for things done	0	1	2	3	4
6.	Shaky	0	1	2	3	4
7.	Listless	0	1	2	3	4
8.	Peeved	0	1	2	3	4
9.	Sad	0	1	2	3	4
10.	On edge	0	1	2	3	4
11.	Grouchy	0	1	2	3	4
12.	Blue	0	1	2	3	4
13.	Panicky	0	1	2	3	4
14.	Hopeless	0	1	2	3	4
15.	Relaxed	0	1	2	3	4
16.	Unworthy	0	1	2	3	4
17.	Spiteful	0	1	2	3	4
18.	Uneasy	0	1	2	3	4
19.	Restless	0	1	2	3	4
20.	Fatigues	0	1	2	3	4
21.	Annoyed	0	1	2	3	4
22.	Discouraged	0	1	2	3	4
23.	Resentful	0	1	2	3	4
24.	Nervous	0	1	2	3	4
25.	Lonely	0	1	2	3	4
26.	Miserable	0	1	2	3	4
27.	Bitter	0	1	2	3	4
28.	Exhausted	0	1	2	3	4
29.	Anxious	0	1	2	3	4
30.	Ready to fight	0	1	2	3	4
31.	Gloomy	0	1	2	3	4
32.	Desperate	0	1	2	3	4
33.	Sluggish	0	1	2	3	4
34.	Rebellious	0	1	2	3	4
35.	Helpless	0	1	2	3	4
36.	Weary	0	1	2	3	4
37.	Deceived	0	1	2	3	4
38.	Furious	0	1	2	3	4
39.	Bad-tempered	0	1	2	3	4
40.	Worthless	0	1	2	3	4
41.	Terrified	0	1	2	3	4
42.	Guilty	0	1	2	3	4
43.	Bushed	0	1	2	3	4

Thank you for completing this questionnaire. Please check back to make sure you have not left any questions unanswered.

FOR AGENCY USE ONLY:

Questionnaire: ☐1 ☐2 ☐3

No. A & P: ☐1 ☐2 ☐3

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