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DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
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CHAPTER I

INTRODUCTION

This chapter, after (1) a brief introduction to the sociological goal of our research, discusses (2) the basic research problem examined; (3) what was involved in the initiation of our study; (4) the historical background of the topic under consideration; and (5) concludes with a brief note on the significance of the study.

The Sociological Goal

The story of disaster is not only a record of the breakdown of social systems, but it is also an account of the development of new social orders (see Form and Nosow, 1958; Loomis, 1960; Fritz, 1961; Moore et al., 1963; Barton, 1970; Taylor, Zurcher and Key, 1970; Brown and Goldin, 1973; Dynes, 1974). Because large-scale natural disasters are not only unanticipated but also especially demanding in their effects, existing patterns of social organization rarely provide sufficient directives for responding in the situation. Thus, on the one hand, these events typically impair, disrupt, and may even temporarily destroy the routine operations of social systems. However, on the other hand, it is this temporary breakdown of the traditional social framework which provides a setting for the emergence of a new social order which comes into being to replace certain aspects of the old system.

Collective behavior as a field of sociological inquiry has traditionally been concerned with studying the ways by which a new social order comes into existence. This view was advanced initially by Park (Park and Burgess, 1924: 865-952). But, this position has been most explicitly stated by Herbert Blumer in his classic statement which delineated the field of collective behavior. He noted that:

The student of collective behavior seeks to understand the way in which a new social order arises, for the appearance of a new social order is equivalent to the emergence of new forms of collective behavior (Blumer, 1951: 168-169).
Thus, to state that the appearance of some sort of new and emergent social organization is a recurrent phenomena in situations of community disaster (Thompson and Hawkes, 1962) is to suggest that such situations typically generate collective behavior. This being the case, disasters provide a fertile setting for the study of collective behavior.

The new patterns of social organization or collective behavior which typically develop in the wake of a major disaster range from the structural or functional changes or adaptations made by existing groups to the emergence of entirely new groups. In fact, research conducted by the Disaster Research Center (DRC) suggests that the appearance of new groups and the alteration of existing ones is indeed a common, if not predictable, occurrence in all large-scale and unexpected community catastrophies (Quarantelli, 1966; Quarantelli and Dynes, 1967; Dynes, 1968; Parr, 1970; Brouillette and Quarantelli, 1971; Forrest, 1972, 1974; Weller, 1973). Substantively, these collectivities include everything from search and rescue groups, welfare groups, first aid centers, and informal communication and coordination command posts to more elaborate and unplanned systems for handling intensive medical problems or providing long-term housing assistance to victims (for illustrations see Quarantelli and Dynes, 1970; Dynes, 1974). Yet, despite the form and pattern of development these organized responses take, they all exhibit the dynamic and ephemeral qualities associated with collective behavior.

Admittedly many of the emergent phenomena which come into being in the wake of large-scale community crisis consensus situations do not conform to the usual stereotypes of collective behavior, such as mobs, fads, fashions, publics, crowds, social movements, panics, cults, etc. However, as Weller and Quarantelli (1973) have suggested, these organized collectivities in disasters can in no sense of the term be characterized as engaging in established or institutionalized patterns of social behavior. For unlike institutionalized behavior which bears a relatively stable relationship to the social setting in which it takes place, these collectivities are typically engaged in creating some major aspect of social organization at the time and in the setting in which the behavior is being enacted. Thus, according to the Weller and Quarantelli (1973) conceptualization, these emergent groups clearly can be considered to manifest the qualities of collective behavior.

Yet their formation and development can not be accounted for on the basis of prevailing theories of collective behavior. This is largely because most of the standard collective behavior approaches tend to characterize collective behavior phenomena in essentially social psychological terms (for a discussion of this matter, see Weller and Quarantelli, 1973; Marx and Wood, 1975). As a result of this conceptual tendency, most explanations of new forms of social organization or collective behavior are, likewise, predicated on what are fundamentally social psychological variables or factors, such as
the psychological states of the participants (Lang and Lang, 1961, 1968; Smelser, 1963; Klapp, 1972) or the atypical forms of interaction among them (Blumer, 1939, 1951; Turner and Killian, 1972). However, while these social psychological analyses are interesting, it is the socially organized behavior of people in collective behavior situations which poses the sociological problem for study. A social organizational approach therefore, instead of a social psychological one, is more appropriate. As Weller and Quarantelli (1973) have already pointed out, the understanding of such organized emergent patterns requires not only a social or social organizational level conceptualization of the phenomena, but also a social organizational level explanation. Thus, our overall goal in this research is to further a truly sociological understanding of emergent social phenomena by setting forth a consistently social organizational framework for explaining the social organizational properties of an instance of collective behavior.

The Research Problem

The collective behavior which our study seeks to describe and explain is the emergence of a system -- i.e., an interrelated new network of organizations -- which came into being to provide mental health related services to the victims of a devastating tornado which struck Xenia, Ohio, on April 3, 1974. The somewhat unprecedented and untraditional nature of this effort to attend to the presumed psychological needs of disaster victims will be discussed in a later section of this chapter. For now, it is enough to note that this organized attempt to deliver mental health related services in the wake of the Xenia disaster was by far broader in scope, more rapid in its implementation, and more deliberately conceived than any such effort to date in American society. Perhaps more important for our purposes, the services were not provided by the established or pre-disaster mental health delivery system, but by a newly emergent entity.

Although the emergent mental health system was spawned, developed, maintained, and eventually eliminated by the established and formally designated mental health system, it was clearly an untraditional and non-institutionalized separate entity in every other respect. It not only was comprised of a different set of interacting organizational components than was the established system, but its two major components were emergent groups which themselves had no existence prior to the disaster. Furthermore, there were no pre-crisis guidelines or patterns of behavior on which the emerging system could base its operations. Thus, both the structure of social relationships between the system's components and the tasks or services it provided had to be developed, clarified, and integrated in the process of its becoming.
If collective behavior is to be identified on the basis of emergent social phenomena, or groups in the process of becoming (Weller and Quarantelli, 1973), then the mental health system which developed in the wake of the Xenia tornado clearly can be identified as an instance of collective behavior.

However, some clearer specifications about the nature of this emergent system need to be elaborated. Any explanation of a phenomena requires some prior systematic attention to the characteristics of that which is to be explained. This research will, therefore, address two basic questions. The first of these is, what are the characteristics of the emergent phenomena to be explained? The study begins with the notion that the delivery of mental health related services in the Xenia disaster involved the behavior of an overall system, rather than separate activities carried out by a number of different organizations. Therefore, the analysis focuses on a multiorganizational system as its unit of analysis, rather than on organizations. Furthermore, since this emergent system is collective behavior, what is most significant to this study, therefore, is the new and untraditional group or system qualities which emerged. In order to identify these qualities or characteristics it will be necessary that they be delineated in genuinely social or social organizational terms.

Thus, our analysis starts out with the concept of "system". Although the term "system" is currently employed in what appear to be a variety of ways, the concept when stripped of its non-essential ideological accretions simply means linkage and relationships among a set of social units. For now, it is enough to note that this is the conceptual imagery on which this research is based. Starting from this perspective, the manner of linkage and the nature of the relationships between the units of a system are not, however, assumed a priori. Instead they are viewed as variable characteristics which can only be established for a particular system through systematic empirical inquiry. Thus, the question of how much of a system exists is always problematic. In identifying the characteristics of the emergent mental health system, the focus will therefore be on determining both how much and what kind of system it was. That is, what were the organizational components of the system, what was the extent and manner of linkage and interdependence among these social units, what was the domain or sphere of its operation or functioning, and what was its relationship to other systems or the larger social setting of which it was a part? As such, these comprise the dependent variables, or the explananda, of the study.

Once the characteristics of the phenomena to be explained have been established, the second question to be addressed is what are the conditions responsible for the emergence of this system and the particular characteristics which it manifested? This, so to speak, constitutes the explanantia of the study. In short, this study aims to
develop a sociological model or framework which will establish a link between the explananda and the explanantia, that is, between the characteristics of the system and some set of prior conditions. This, in turn, is partly dependent on an assumption made about the collective behavior nature of the emergent organized effort to deliver mental health related services following the Xenia disaster. The distinctiveness of a collective behavior approach lies in its concern with the more nonroutine, dynamic, untraditional, and uninstitutionalized patterns of organized social behavior; whereas, in contrast, conventional sociology is generally interested in the study of routine, ongoing, traditional, and institutionalized social behavior (Turner and Killian, 1972). In fact, some theorists even go so far as to state that collective behavior is virtually "everything that social structure is not" (Pfautz, 1974: 26). Implicit in both of these distinctions is the assumption that since collective behavior is somehow different from and discontinuous with normal or routine social behavior, then the explanations advanced for collective behavior phenomena should likewise differ from those advanced for institutionalized patterns of social behavior.

Undoubtedly there is something about collective behavior which is different from routine institutionalized behavior. However, because more theorists take crowd behavior as the prototypical form of collective behavior (e.g., Fisher, 1972, who explicitly takes this position), they tend to overemphasize the differences, rather than the similarities between collective behavior and institutionalized behavior. In fact, for most theorists, the distinctiveness of collective behavior is reduced to the social psychological aspects of the behavior. (Although many of these theorists would deny this, see Blumer, 1957; Lang and Lang, 1961; Smelser, 1964; Turner and Killian, 1972; Klapp, 1972; Lewis, 1972; Brown and Goldin, 1973; and Berk, 1974, for examples of this.) Thus, according to the dominant approaches, the central question to be answered in explaining collective behavior is: if "individuals normally behave according to institutionalized patterns" (Blumer, 1957: 130), how is it that the individual is different in collective behavior situations as opposed to those situations in which one engages in institutionalized behavior? Of course, the result of this preoccupation with the distinctively social psychological aspects of the behavior has been to encourage either social psychological, or worse yet, special or ad hoc explanations of emergent phenomena which fail to draw from the larger core of sociological theory.

This study accepts a rather different perspective which was advanced by Weller and Quarantelli (1973). While these theorists recognize that there is something distinctive about collective behavior, the differences between collective and institutionalized behavior are to be found in the social properties or characteristics of the behavior. According to this view, collective behavior and institutionalized behavior are both predicated upon social organization. In this respect, the two forms of behavior are alike. However, for
institutionalized behavior, social organization bears a relatively stable or traditional relationship to the social setting in which it takes place, while in collective behavior, some major aspect of the social organization is created at the time and in the setting in which the social behavior is enacted (Weller and Quarantelli, 1973: 675).

Two major ideas are contained in this conceptualization of collective behavior, and both have implications for the level of identification and of explanation to be employed in the present study. First, what this means is that collective behavior is, indeed, distinctive or different from routine or established patterns of social organization. But what this also means is that since the generic sociological properties of the two types of phenomena are similar (both are predicated on social organization), then collective behavior can be identified and explained with the same descriptive and analytical models which are applied to institutionalized behavior. The second idea implied above but further developed by Quarantelli and Taylor (1975) is that by examining the larger social setting in which collective behavior is enacted, it becomes evident that no instance of collective behavior is purely emergent or spontaneous in character. Rather, it is out of the interaction of groups which already exist that new groups or patterns of social organization come into being. Given this, the appearance of collective behavior is not therefore to be viewed or explained as a sudden discontinuity or break with existing or conventional forms of social organization, but as an outgrowth of a larger social setting which is comprised of interacting groups whose actions even prior to the emergence of collective behavior are a critical element in its emergence. From these two premises, it can be deduced that a central problem of collective behavior research is to find a consistently sociological level for handling the social organizational properties or characteristics of collective behavior phenomena, as well as the social organizational settings involved in its emergence.

To this end, this research utilizes an open systems model to account for the emergence of the new mental health system which came into being following the Xenia tornado. Such a model is genuinely sociological. At least as it will be used in our study, it assumes that both the characteristics of and the conditions responsible for the phenomena being analyzed -- i.e., the emergent system -- can be viewed in social organizational terms. This actually was the stance taken from the initiation of our study as will now be discussed.
Inception of the Study

This research was conducted under the auspices of the Disaster Research Center of the Ohio State University. Since its inception in 1963, the primary research objective of DRC has been the systematic sociological study of organizational response to large-scale community crisis situations. This study is intended to carry on and to further that tradition. However, it departs from the DRC tradition in that it represents the first attempt by DRC, or anyone else for that matter, to undertake a systematic sociological analysis of the delivery of mental health related services following a major disaster. For this reason, it is important to indicate in some detail how the present study came about.

The Tornado Impact

While it is not the purpose of this study to describe the Xenia disaster in detail, it is necessary to begin by briefly indicating the magnitude of the disaster which gave rise to the phenomenon being studied. The tornado which struck Xenia, Ohio on April 3, 1974 was actually one of a series of 148 tornadoes which in a six-hour period ripped through more than 200 counties in 13 states, killing an estimated 315 people, seriously injuring over 6,000 others, destroying or heavily damaging about 21,000 buildings and dwellings, and occasioning losses of over a half of a billion dollars from the edge of the Gulf of Mexico to just beyond the Canadian border. According to the survey undertaken by the National Disaster Survey Team, National Oceanic and Atmospheric Administration (1974), this tornado outbreak on April 3-4, 1974, was clearly the most severe in recorded history, making what occurred in Xenia only a part of a much larger catastrophic day in American history. Nevertheless, both in terms of casualties and property losses the community of Xenia, Ohio, suffered the greatest destruction. Not only were 33 persons killed and around 1,200 others (or about 5 percent of the total population) injured, but the level of property losses suffered by the city were staggering. In some cases, entire neighborhoods were reduced to rubble thus destroying a total of 20 percent of the residential housing and damaging a slightly higher proportion. Also much of the downtown business section of Xenia was devastated or severely damaged, as well as many of the small business and the largest manufacturing firm in the city. The result of this was at least a temporary loss of 52 percent of the job market in town. Over half of the city's eleven school buildings were virtually demolished, leaving a total of 10 million dollars in destruction to city schools,
and 25 percent of the community's churches were leveled. In effect, the overall devastation produced by the tornado resulted in the need to rebuild approximately one-fourth of Xenia, while another one-fourth of the community required extensive repairs. Thus, by any criteria, measured either in relative or absolute terms, the tornado which hit Xenia on April 3, 1974, was one of the worst disasters in American history.

Of course, what is socially important about a disaster is not the sheer physical damage and destruction, impressive as that may be. Rather what is crucial is the disruption of community life, the marked alterations of routine patterns of social expectations and day-to-day personal habits. Thus, while the physical impact of a tornado may literally be over in a few minutes, these other consequences extend for weeks, months, and some will extend for years. A disaster of this magnitude does far more than wreck buildings and sever lifelines; it interrupts the rhythm, cycles, and very social fabric of community life. Such, then, was the case in the Xenia tornado as in any major disaster.

The Initiation of the Research

Due to the physical proximity of DRC to the tornado area (about 50 miles away), within four hours after impact, a three-person field team was in Xenia. The initial activities undertaken by DRC in Xenia were exploratory in nature. The primary focus at this point was to determine the response made in the emergency period by traditional disaster-relevant community organizations, such as the local hospital, the police department, the fire department, civil defense, city and county government, and the Red Cross. However, within a few days members of the field team became aware that an attempt was being made to organize some type of effort for delivering mental health related services in relation to the disaster. Because of DRC's longstanding involvement and familiarity with disaster responses, it was immediately evident that what was being done in this connection represented one of the first major attempts to specifically and deliberately attend to the emotional and psychological needs of victims. It was also clear that the effort involved the forging out of new courses of action which were different from the traditional pattern of delivering services. On the basis of this, DRC decided that the study of the organized effort to provide mental health related services would provide an excellent opportunity to study emergent social phenomena. Furthermore, because the delivery of mental health related services in the disaster setting was almost from the outset defined as a system, rather than an organizational problem, it provided DRC with the additional opportunity of being able
to undertake an exploratory study of emergent collective behavior phenomena which manifested the characteristics of a system. Such, then, were the reasons why this study was initiated within a week after the disaster occurred.

But there were also others who saw the need for a study. Not long after the DRC study was already underway, staff members of the Ohio Department of Mental Health and Retardation likewise recognized the somewhat unprecedented nature of the mental health related activities being carried on in Xenia. They saw that this situation presented for them an excellent opportunity to learn lessons which might help in preparing for and responding to mental health related problems in future disasters in Ohio. They, therefore, proposed to fund part of the study which DRC had, in fact, already committed itself to doing. However, the acceptance of the funding enabled the undertaking of a much larger scale research effort. Then a few months after the disaster, DRC was approached by a Xenia area interdenominational religious group which had emerged to help victims with disaster-related problems. They asked cooperation and assistance in conducting a door-to-door survey of a random sample of over 800 households in the Xenia area. This, therefore, provided DRC with the opportunity to undertake an epidemiological study to determine both the nature, range, and extent of mental health and other problems among victims, as well as to obtain data about victims' perceptions of and contact with the various mental health organizations DRC was studying. This data gathered on the receivers of the services in combination with the data collected with regard to the organized deliverers of the services constitutes by far the largest amount of data ever collected on the delivery of mental health related services in a disaster. Thus, while the research to be presented here focuses more specifically on the emergent organized effort to deliver services, this study is not simply an isolated research effort. Rather, it is only a part of a larger research undertaking in Xenia conducted by DRC under the field supervision and direction of this author.4

Because of the unconventional and emergent nature of the phenomena being analyzed, the method employed in the present study is that of an exploratory case study. Given the state of knowledge about the phenomena, the researcher decided that this method would be most appropriate. As a matter of fact, not unlike the mental health delivery system in Xenia which had few guidelines on which to base its post-disaster activities, our study was also handicapped by the relative absence of any prior research or conceptual framework on which to build the research effort. To make this statement clearer, it is important to point out briefly the historical background of the organized delivery of mental health services in American disasters and the research which has been generated on this topic, scanty though it may be.
The Historical Background

Systematic efforts to provide mental health related services to disaster victims is a phenomena which has emerged only in the last several years. It follows that the history of the organized delivery of such services in American disasters is relatively short. This being the case, little research either of a descriptive or an analytical nature has been undertaken on delivery efforts. Nevertheless, an examination of the brief history of these activities and the current state of knowledge about them is necessary to provide a general background for understanding both the emergent and unconventional nature of the effort which developed in Xenia, as well as the kind of exploratory study this researcher was forced to undertake in the same situation.

Past Delivery of Mental Health Services

Disasters have always occurred and subjected their victims not only to material losses, but to social disruption and psychological stress and strain as well. For some time, disaster planners, community officials, and the public at large have believed that human beings do not react too well in the face of these large-scale dangers and threats. (For documentation of these beliefs, see Quarantelli and Dynes, 1971; and extensive surveys by Wenger et al., 1975; and Blanshan, forthcoming.) However, most systematic investigations of human behavior in collective stress situations of a consensus type, have found evidence which sharply contradicts this imagery. In fact, most disaster researchers agree that disaster-impacted populations actually display a rather low rate of serious nonadaptive behaviors, such as panic, shock, hysteria, or other major forms of social and psychological disorganization (Marks and Fritz, 1954; Barton, 1962; Quarantelli and Dynes, 1971). Nevertheless, the average person is still exposed, through journalistic accounts of disasters, to the notion that much of disaster behavior is maladaptive, bizarre, or antisocial. As far as the present study is concerned, the most important of these stereotypes, and the one which has thus far generated the least amount of systematic research support is the widespread belief that post-impact afterreactions include hysterical breakdowns, psychotic episodes and other forms of psychopathology. In other words, the imagery is essentially that disasters exacerbate or create mental illness. This overwhelmingly grim picture that large numbers of people are left temporarily, if not permanently deranged by large-scale disaster events, is often supported by novels, movies, and other mass media accounts.
For example, after a series of major disasters in 1973, a national news magazine noted the following:

after the first surge of activity is over, another reaction sets in -- this one a kind of shared psychosis that hits just about everyone affected directly or indirectly by the event.

The story then goes on to note that

a few weeks after a catastrophe, symptoms of emotional problems become disturbingly obvious: the number of successful suicides rises by about a third, hospital admissions for psychiatric reasons run at double the normal rate and the frequency of accidents skyrockets (Newsweek, 1973: 62).

Furthermore, journalistic sources are often able to cite a few professionals who also share these views. Thus, in a recent article developed from a paper given at an American Psychological Association Symposium it is stated,

Disasters... unleash powerful behavioral reactions and emotions which often are overwhelming... it is clear that disasters demand new ecological balances to be established between man and his environment since it has been repeatedly demonstrated that the loss of life's familiar benchmarks induces intense stress leading to physical and mental illness (Schulberg, 1974: 77).

A similar picture emerges from a report by a psychiatric team who diagnosed a number, but by no means a random sample of the victims of the Buffalo Creek disaster (Titchener et al., 1975). These psychiatrists note the following about the victims of that disaster:

The meanings and associated affects of the catastrophe and its aftermath, as well as the psychological and social ways our subjects chose to deal with it, must be seen against the background of the universal crises of human development. The attendant threats of separation, abandonment, castration and death, residuals of the developmental crises of separation and individuation provided context for the meaning of the catastrophe to the survivors. We found a definite clinical syndrome in the survivors of the Buffalo Creek disaster arising from the immediate and short-range impact of the catastrophe on each individual and the subsequent disruption of the community which afflicted
everyone living there. All were affected because we are all predisposed by previous experiences to pathogenic forces as destructive and awesome as the Buffalo Creek Valley catastrophe (Titchener et al., 1975: 2).

In fact, even when pathological symptoms are not manifested by victims, the belief of mental illness is often maintained. Thus, in a restatement of a position developed about two decades ago (e.g., Wallace, 1956; Tyhurst, 1957; Wolfenstein, 1957), it is said,

Even when there has been no loss of human life, one can expect a predictable sequence of such behaviors as shock, guilt, anger, and grief to occur among affected persons over a six to twelve month time period. A disaster victim's failure to display these normative reactions should not lead to the conclusion that all is well; instead, it should alert the care-giver that the victim potentially is employing maladaptive resolutions (Schulberg, 1974: 85).

Such self-fulfilling prophecies unsupported by independent indicators of difficulties, of course, are relatively immune to almost any kind of data test.

Anecdotal examples and occasional clinical cases of severe post-disaster pathological manifestations can be found. However, systematic and empirical studies of a range of disasters have consistently failed to support the speculations and guesses that mental illness is often or on a wide scale, something that appears after impact in American society. Research in the last two decades by DRC (Quarantelli and Dynes, 1972; V. Taylor, Ross and Golec, forthcoming), by Drabek and his colleagues (e.g., Drabek and Stephenson, 1971; Drabek et al., 1973), and by others at different time periods (e.g., Marks et al., 1954; Form and Nosow, 1958; Zusman et al., 1973; Hall and Landreth, 1975), as well as the earlier National Academy of Science research guided by Fritz and Williams (e.g., Bates et al., 1963; Moore et al., 1963), have generally found a different picture. Very few people break down in the face of major disasters, and incapacitating psychological reactions are actually rare in catastrophes. The seeking of help for severe psychopathology is notable for its absence. Mental illness on any scale is not a major consequence of even massive disasters. It apparently is also not a result of other kinds of very stressful situations, such as large-scale air raid bombings (for documentation, see Janis, 1951) or even of prolonged violent civil disorders as in northern Ireland (Peipert, 1975). In fact, the therapeutic community or community of sufferers (Fritz, 1961: 684-689; 1968: 202-204) engendered by most mass disasters serves to reduce the stress and therefore manifestations of extreme psychopathology (Wilson, 1962).
Nevertheless, few would deny that disaster victims undergo considerable psychological and emotional stress and strain in connection with large-scale catastrophic events. For not only do disasters disrupt personal routines and social patterns, but they occasion threats and dangers to life, property, and other important social values. Only someone out of contact with reality would fail to respond with some degree of affect when directly threatened or endangered in these ways. Thus, while disasters may not create mental illness, they do undoubtedly have the potential to affect mental health. This is precisely the position advanced and supported by a slowly accumulating series of qualitatively and quantitatively based studies of a variety of disasters conducted by researchers with different backgrounds (Zusman et al., 1973; Zarle et al., 1974; Penick et al., 1974; Heffron, 1975; and Hall and Landreth, 1975). As will be discussed later, this latter position has radically different implications from those of the former.

But for the present, neither the widely held mythological belief of mental illness nor the actual existence of mental health related problems has had much impact on either the organized preparation for or the response to disasters. For the most part, disaster services in American society are almost exclusively directed towards insuring that victims are provided with food, clothing, and shelter in the long run, and that property and physical facilities are restored in the long run. Of course, to some extent the mental health problems of disaster victims have been attended to in an indirect way in the past through the efforts of a few private relief agencies, such as the Red Cross, and religious groups like the Salvation Army, one of whose disaster functions is to provide "spiritual comfort" (see Ross, 1969). That disaster victims might suffer psychological and emotional distress or injury as well as physical loss has certainly been recognized. Yet these human reactions have generally not been visualized as problematical enough to be specifically addressed by disaster plans or preparations. As evidence of this, a recent DRC survey of emergency planning in 12 highly disaster-prone cities around the country documented that there is a general lack of interest in planning for and attending to the emotional and psychological aspects of disasters (Dynes and Quaranelli, 1975). In fact, at the time of the Xenia tornado the only exception to this was in Columbia, South Carolina, where in 1973, for the first time anywhere, an explicit plan for dealing with "psychiatric casualties" in disasters was developed between a community mental health center and the local defense office (Gold Award, 1974).

However, this general orientation started to change in 1971-72. In the wake of a series of major disasters occurring in those years, for the first time conscious and organized efforts were made to deal with the mental health related problems of impacted populations. In varying degrees, this occurred in San Fernando, California, after the
earthquake; in the Wilkes-Barre, Pennsylvania, and the Corning, New York, areas after the flooding from Tropical Storm Agnes; around Buffalo Creek, West Virginia, in the aftermath of a dam rupture; and in Rapid City, South Dakota, after a flash flood. At this point it is not necessary to be concerned with the question of why in 1971-72 attention was suddenly paid to the mental health and related problems of disaster victims. This will be discussed as part of the explanation for what occurred in the Xenia situation. For now, it is enough to note that this undoubtedly was connected to the success of the community mental health movement in this country in the last decade (Bloom, 1973; Mauss, 1975). Particularly important is that one of the distinguishing characteristics of community mental health practice is the method of crisis intervention. Interest in crisis intervention can be traced to the seminal work of Lindeman (1944, 1962) who played an active role in providing psychiatric assistance to the survivors of the Coconut Grove fire. Since that time the notion of crisis intervention and other forms of active intervention have taken deep roots in the ideology of the community mental health movement (Taplin, 1971). It is not surprising therefore that when the 1971-72 disasters hit, attempts were made by federal and various local mental health agencies to implement this ideology.

Nevertheless, at that time there was clearly no precedent in American society for providing any type of mental health related services, crisis intervention or otherwise, in a large-scale disaster. Therefore, little was known about either the amount or kinds of mental health intervention which would be needed as well as how the services offered might be organized and linked with those of other disaster organizations. Thus, at one extreme, there were the services offered in the Wilkes-Barre, Pennsylvania flood, by an emergent organization called Project Outreach which emphasized prevention and early intervention aimed at alleviating more long-term disabilities among the victim population (Heffron, 1975). This was largely accomplished through "reaching out" to flood-impacted individuals and providing them with either direct supportive therapy and/or assisting them in getting aid from other agencies. At the other extreme, there were the more clinical and psychoanalytical strategies employed by a team of outside psychiatrists who offered their services in connection with the Buffalo Creek disaster. However, since these latter services were undertaken in connection with a class action suit by victims against a mining company charged with responsibility for the disaster, they amounted more to diagnosis than treatment per se (Titchener, 1975). In any event, due to the emergent and unprecedented nature of all of these efforts, the mental health related services provided in each of these disasters were less than comprehensive. Even more importantly, little consensus regarding appropriate models and methods of disaster-related service delivery emerged out of these first attempts to respond, which might have served to guide those attempting to organize mental health intervention in future disasters. As a matter of fact, there is hardly
even any clearcut consensus as yet that mental health services of any kind should be provided to victims of natural disasters.

Set in this historical context, the delivery of mental health related services which emerged in the wake of the Xenia disaster was not altogether unexpected to an observer familiar with these other events. But to the participants in the situation, this idea was so novel and unanticipated as to be almost inconceivable. The actions undertaken in this regard were, therefore, bound to manifest emergent qualities. But even if those involved in trying to provide the services had turned to these prior efforts and to the literature in the area they would have obtained neither full agreement nor clear guidance as to how to proceed in their efforts. Our discussion will turn now to a brief examination of the scanty and scattered references existing on this topic.

Status of Current Knowledge

It was not until the last two decades that scholarly discussions began to focus on the relationship between disasters and mental illness. As would be expected the earliest writings on this subject were undertaken from a psychological or social psychological perspective. In fact, a thorough examination of the literature reveals that the few discussions which do focus on mental health services in disasters are more concerned with analyzing the characteristics or nature of the mental health related problems elicited by these events, rather than the organized delivery of services. (For rare exceptions to this prior to the last five years, see Erickson, 1952; Weil and Dunsworth, 1958; and Shader and Schwartz, 1966.) Most of the earlier writings on this subject were largely theoretical in nature, advancing general guesses and scholarly speculations based largely on anecdotal data or, at best, on clinical evaluations of small and selected groups of victims (Tyhurst, 1951, 1957; Menninger, 1952; Wallace, 1956; Perry and Perry, 1959; Glass, 1959; Moore and Friedsam, 1959; Wilson, 1962; Crawshaw, 1963; Farber, 1967; Lifton, 1970; Vosberg, 1971). However, concommittant with the events of 1971-72, interest in uncovering the short-and long-run psychological consequences of disasters began to grow. But, with only a few exceptions (Drabek et al., 1973; Taylor, Ross and Golec, forthcoming), most of the treatments of this subject still failed to be based on systematic empirical research (Kroegler and Hicks, 1972; Kliman, 1973; Church, 1974; Michael, 1974).

With the onset of efforts to organize the delivery of some type of mental health services in relation to the disasters of 1971-72, a few references began to appear which dealt with limited aspects of service delivery (Birnbaum et al., 1973; Feld, 1973; Grossman, 1973; Harshbarger, 1973; Kliman, 1973; McGee, 1974; Sundel, 1974; Zarle
et al., 1974; Okura, 1975). However, most of these writings were either descriptive or diary accounts of participants in or close to the situation, or discussions of specific intervention strategies employed in these particular events. While undoubtedly useful for certain purposes, these articles contain few generalizations of even a descriptive nature, little quantitative or qualitative data, and few references to the disaster literature and to one another to aid in generalizing. Aside from these accounts, there are a few systematic evaluative studies which were undertaken of the organized efforts to respond to the Wilkes-Barre, Pennsylvania, and San Fernando, California, disasters. (See Zusman, et al., 1973 for a thorough evaluation of Project Outreach in Wilkes-Barre; and Blaufarb and Levine, 1972, and Howard and Gordon, 1972, for a less thorough examination of the intervention techniques employed in connection with the San Fernando earthquake.) However, none of these studies, nor any others that this researcher is aware of, have attempted to described and explain the emergence and characteristics of an organized effort to provide mental health related services in a given disaster within a social scientific framework.

Thus, in summary, for reasons just indicated those groups attempting to provide mental health services to victims of the Xenia disaster had very little to guide them either by way of prior practical examples or systematic scientific research. And, likewise, the researcher, too, had few points of departure from which to launch what was the first exploratory attempt to systematically examine this phenomena. Yet it seemed an eminently significant topic for research as will now be noted.
Significance of the Research

This exploratory case study of the emergent organized effort to deliver mental health related services following the Xenia tornado is important for at least two reasons. Theoretically, it represents one of the first attempts to conceptualize and explain collective behavior phenomena in system level terms. The first collective behavior theorist to introduce the idea of applying systems theory to collective behavior phenomena was apparently Orrin Klapp (1972; 1975), although outside of the area Buckley (1967) had earlier noted the possibility. Forrest (1973; 1974) has since advanced the same notion through his research on emergent groups. However, the present study is, nevertheless, the first to develop and consistently apply a systems perspective to the social organizational properties of an actual instance of collective behavior. Of course, some will oppose the use of such a perspective to analyze collective behavior phenomena. This is because many have rightfully charged that a systems approach to social analysis can be analytically static by emphasizing stability, integration, and equilibrium to the neglect of instability, conflict, and disequilibrium (Lockwood, 1956; Barber, 1957; Mills, 1959; Dahrendorf, 1959). However, it is these latter processes which are usually associated with collective behavior phenomena. But a systems analysis need not necessarily be a static analysis. (Buckley, 1968; Bertalanffy, 1968; and Berrien, 1968 discuss more dynamic approaches to systems phenomena.) As a matter of fact, one of the objectives of this study is to demonstrate that a general systems perspective, like other areas of sociological theory, can profit from studies of more dynamic collective behavior phenomena. But, even more importantly, by applying a systems perspective, the present research seeks to analyze an instance of collective behavior on the basis of the same set of general principles used to deal with routine and institutionalized social systems, thereby hoping to relate collective behavior more intimately with other areas of sociological theory.

This research is significant for another more substantive reason. The idea of attending to the presumed psychological needs of disaster impacted populations has, since the Xenia disaster, increasingly gained wide acceptance, and therefore represents a major new trend in the organized response to disasters in American society. Indicative of this, only a month after the Xenia tornado, federal legislation was enacted charging the National Institute of Mental Health (NIMH) with the formal responsibility for delivering mental health services in future disasters. In other words, what was in the past an emergent collective behavior response has now become an institutionalized response pattern. But, with the exception of this study, no other systematic investigation has been undertaken on the organized delivery of mental health services in a disaster context. By being the first research within this substantive area, this study, exploratory though it may be, contributes not only to the understanding of this new and changing social pattern, but undoubtedly also to its literal discovery.
Outline of the Study

This chapter has described the basic research problem, how and why the study was initiated, the historical background surrounding the topic under consideration, and the theoretical and substantive contributions to be made by the research. In Chapter II the basic objectives of the research will be more clearly delineated. These are to present the contexts, characteristics, and conditions associated with the emergent mental health system. Also discussed is the general analytical framework from which the study was undertaken, along with the methodological procedures employed in gathering and analyzing the data for this research.

Chapter III is the beginning of the analysis. It analyzes the larger sociocultural contexts, particularly the institutionalization of the community mental health movement in American society, which affected the characteristics of the established mental health system which existed in Xenia at the time of the tornado. This larger context and the pre-impact characteristics of the system together comprise the general framework within which the mental health system in Xenia responded to the disaster. Chapter IV has two major sections. It begins with a discussion of the short-run response of the established mental health system to the disaster. Primarily descriptive, this section is important, since it points out the attempt made by the established system to respond to the new and greater demands generated by the disaster, the types of capabilities it was able to provide, and those it could not muster to meet these demands. The second section describes the shift from an established to an emergent mental health system which came into being to provide the bulk of the disaster-related mental health services and it systematically analyzes the characteristics of the new mental health delivery system.

Chapter V presents the more substantive findings in regard to the conditions which account for the shift from an established to an emergent system. It is demonstrated that as a result of certain new endogenous and exogenous sociocultural conditions created by the disaster, the ongoing demand-capability ratio of the established mental health system was disrupted. These post-impact conditions, in combination with existing contextual factors, resulted in the emergence of a new mental health system with a particular set of characteristics. Finally, Chapter VI finishes all the analysis by discussing the conclusions of the research and addressing the theoretical and substantive implications of the findings.
Footnotes

1. The idea is implicit in Le Bon (1897); but, as Bramson (1961) has noted, this view did not start to become explicit until the "Americanization" of the field, its becoming a part of American sociology in the second decade of the century.

2. Consensus types of crisis situations refers to those in which there is relative agreement on the source of the difficulty and what should be done about the problem. The contrast is with dissensus situations (e.g., civil disturbances or riots) where such relative consensus is lacking. For a discussion of the consensus-dissensus idea, see Quarantelli and Dynes (1970), and Quarantelli (1970b).

3. More detail is presented in Taylor, Ross and Quarantelli (1976); a popular account is given in Laffoon (1975). The figures and statistics in the next several pages are taken from the first account.

4. The survey data in particular will be reported in Taylor, Ross and Quarantelli (1976). Other of the Xenia material is in the process of being prepared at DRC for publication in various sources.

5. This generalization is primarily applicable to the United States insofar as the empirical evidence is concerned; for the time being its validity elsewhere is an open question.

6. Yet, as Quarantelli (1969) points out, there has been an overemphasis on emergent conflict groups in the field of collective behavior and lack of emphasis on emergent groups which are accomodative in nature, such as the ones studied in this research.
CHAPTER II

THE OBJECTIVES, ANALYTICAL FRAMEWORK AND METHODOLOGY OF THE RESEARCH

This chapter presents a discussion of: 1) the basic objectives of the research; 2) the general analytical framework from which our study was initiated in order to meet these objectives; and 3) the methodological procedures and techniques employed in gathering and analyzing the data of this study.

Introduction

The primary reason for undertaking this research was to learn more about the emergent organized effort to deliver mental health services in the Xenia disaster. But from the outset, the intent of the study was not simply to set forth a detailed historical and descriptive account of this particular set of events which occurred at a specific time and place. Instead, our objective was to develop a more general theoretical framework or model which would not only account for the emergence and characteristics of this particular case example, but which might eventually be used in describing and analyzing other instances of emergent collective behavior phenomena. In this instance, the most adequate and efficient methodological strategy for carrying out this objective is the exploratory case study. However this case study does not involve a systematic test of hypotheses derived from a previously established theory. Rather it takes an exploratory qualitative inductive approach which intends to develop the analytical, conceptual and categorical components of the explanation from the data itself (Filstein, 1970: 6).

There are three factors directly related to this specific study which necessitate the use of an exploratory qualitative inductive approach, rather than a verificational or deductive approach. First, while both the collective behavior literature (Klapp, 1972; Forrest, 1972) and the literature in the general system area (Buckley, 1967) do suggest some important directions for exploration with respect to the research problem, neither of these perspectives supply adequate conceptual tools, much less hypotheses, which are clearly related to either the substantive or analytical focus of this research. As was discussed in Chapter I, within the area of collective behavior neither the research tradition nor prevailing theories have much bearing on the
system level of analysis assumed by our study. At least one general systems theorist, Buckley (1967), does recognize the relevance of a general systems perspective for studying collective behavior phenomena. However, general systems theory as yet remains a very general, relatively undeveloped, content-free conceptual framework within which any number of substantive theories of social reality may be inserted. This being the case, the most suitable methodology for meeting the objectives of the study was to employ a qualitative strategy which turns primarily to the data itself for the development of the more specific substantive components of the explanatory framework.

Second, changing, dynamic and emerging phenomena were being studied. It was necessary therefore, to employ an equally dynamic exploratory strategy which would allow for successive modification and formulation of the explanatory framework through the interplay of new data as well as conceptual points of view which were developed at various stages in the research process. As Becker (1970) points out, particularly suitable for this is a qualitative inductive approach.

The final reason for utilizing this strategy is that the alternative to a qualitative inductive methodology -- that of verifying more narrowly drawn and precise propositions deduced from appriori theoretical schemes -- is dependent upon prior adequate description and conceptualization of the phenomena to be explained. In our case, the phenomena on which this research focuses were literally being created concurrent with the undertaking of the study. Therefore, to obtain even a good descriptive grip on the collective behavior involved, required the casting of a research net which would capture the greatest amount of empirical data. Employing an exploratory qualitative strategy allows the study to emphasize adequate description of the collective behavior prior to seeking the conceptual and explanatory tools which give promise of yielding the greatest understanding of it.

Thus, in general, the methodology of this study was not merely employed because it is one of several suitable ways to go about doing useful sociological research. Rather, because of the above factors, it was the most appropriate approach for meeting the objectives of the present study. This study took the seemingly more fruitful approach of attempting to inductively generate theory from a wide range of qualitative data, instead of trying the more dubious task, in this particular case, of quantitatively testing specific hypotheses deduced from some general theory.

Nevertheless, our research did begin with a very general conceptual framework which served primarily as a pragmatic device to guide the data gathering and analysis. To further indicate the sensitizing (à la Blumer, 1954) concepts of this general framework and the way in which they directed the focus of the research, the discussion now turns to a more detailed examination of the study's basic objectives.
Basic Objectives

The primary objective of this study is to describe, analyze, and explain the new mental health system which came into existence following the Xenia tornado. In its beginning phases, the research was guided by two general assumptions about the nature of group emergence which are based on findings from prior studies undertaken by DRC (see previous references). These guiding assumptions were: 1) group emergence occurs when a social system experiences some dramatic crisis, such as a natural disaster, which creates an identifiable need either for new tasks or a greater number of old tasks to be carried out; and 2) group emergence occurs when established organizations or collectivities are not able and/or willing to fulfill these needs.

Following from these prior research findings, the theoretical ideas used to organize and develop the analysis assume, therefore, that what occurred in Xenia revolved primarily around the fact that the existing pre-tornado mental health system could not respond well to the disaster situation. Our study consequently begins with the premise that there was social system for delivering mental health services in Xenia prior to the disaster. This system was put in a crisis state by the tornado. That is, the disaster created both qualitative and quantitative changes in mental health needs, which the ongoing system in existence for delivering mental health services before the tornado, or in the Time One period, could not respond. Therefore, after the disaster or in Time Two, there emerged a new system for delivering the services. These notions can be graphically depicted as follows:

**TIME ONE**

An established mental health delivery system $\rightarrow$ disaster $\rightarrow$ An emergent mental health delivery system

**TIME TWO**

What the brunt of this study is about is to describe, analyze, and explain the change that occurred in the delivery of mental health services between Time One and Time Two, that is the shift from an established to an emergent mental health delivery system. In posing this as the research problem, our study started out with three "sensitizing" concepts or analytical dimensions through which the dynamics of the delivery system changes associated with the disaster were examined. These were the concepts of context, conditions, and characteristics.
Simply stated, by contexts is meant the background sociocultural factors or developments affecting the characteristics of the mental health delivery system as it existed in Time One. Conditions has reference to the immediate post-impact factors which contributed to the emergence of and characteristics manifested by the new mental health delivery system in Time Two. The concept of characteristics denotes the observable features of the mental health delivery system, whether it be the behavioral characteristics of the established Time One system or the emergent Time Two system. While these labels as such were not important in themselves, what they sought to capture however is crucial. In effect, they served throughout our research as heuristic devices which first guided the data collection process, and later aided in the discovery, development and organization of the more specific substantive components of the description and explanation advanced.

In generic terms, the relationships between these three concepts were posited in the following way. Certain aspects of the sociocultural contexts in association with particular post-impact conditions resulted in certain characteristics manifested by the emergency mental health system. Thus, stated succinctly, the objective of our research is to describe and analyze the contexts and conditions which resulted in the characteristics exhibited by the mental health delivery system which emerged in Time Two. This can be graphically depicted as follows:

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TIME ONE        TIME TWO

Contexts --> Characteristics ------ > Conditions ------ > Characteristics
of Established Mental Health Delivery System
                      of Emergent Mental Health Delivery System
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It should be noted that the value of the concepts of contexts, conditions, and characteristics is not in their formal or logical order, since these analytical dimensions were not derived from systematic theory. Rather, the value of these concepts lies in their heuristic usefulness, for each concept successively applied yields different orders of data relevant to the research problem at hand. Even so, taken together the notions of contexts, conditions, and characteristics are little more than a general, content-free, conceptual framework within which any number of different substantive theories could be inserted. But to start this way is consistent with the overall objective to develop the more specific analytical and explanatory or substantive categories from the data itself.
In the strictest sense of the term our study was initiated from an atheoretical vantage point, seeking to generate adequate description prior to the development of an explanatory framework. Nevertheless, the search for the contexts, conditions, and characteristics associated with the emergent mental health delivery system was influenced by the research and theoretical tradition within the fields both of collective behavior and general system theory. However, by no means were specific theories of collective behavior or general system theory utilized and applied \textit{sui generis}. Rather, in both cases, conceptual ideas were drawn from each of these two sociological perspectives on the basis of the contribution each perspective made to the research problem at hand. Since each approach provides a different set of questions applied to the data, the eventual outcome of this strategy was a composite perspective derived from the theoretical tradition in both the area of collective behavior and general system theory.

At this point, it is necessary to indicate further in precisely what specific substantive components of the theoretical framework. To do this, the concepts of context, conditions, and characteristics will be briefly discussed along with the ideas from the fields of collective behavior and general system theory which underlay the use of these three analytical dimensions throughout the research process.

\textbf{Contexts}

To know and understand any set of emergent social phenomena requires a description and analysis of the general contexts out of which the phenomena come. What this statement suggests is that the development of new forms of collective behavior are most productively viewed as a direct outgrowth of the larger sociocultural context out of which they emerge, rather than as abrupt breaks with existing patterns of social organization. This idea is well-rooted in some of the theoretical and research tradition of the collective behavior area (for examples of this, see Smelser, 1963; Turner, 1967; Schatzman, 1960; Quarantelli and Taylor, 1975). But other more dominant theoretical orientations in sociology, more particularly structural functionalism and general systems theory, tend to be decidedly more ahistorical in the explanations they advance for organized social behavior. Subsequently, to apply these approaches in analyzing emergent social phenomena would lead to a primary concern with and subsequent over-estimation of the more immediate factors or determinants which account for new forms of socially organized behaviors.
However, consistent with the findings of collective behavior research, our study starts with the premise that the larger sociocultural setting in which collective behavior takes place is always proactive. This means that the larger sociocultural context, factors or conditions which were operative even before the collective behavior emerges, are critical elements contributing to the emergence and characteristics manifested by new patterns or forms of collective behavior. Collective behavior is not only a response to something happening; it is also in part a continuation of what is already happening. Thus, to ask what were the general contexts which influenced the coming into being of a totally new and emergent mental health system, is to ask what evolutionary trends, background settings, and ideosyncratic historical and accidental developments contributed to the kind of mental health delivery system which existed just prior to the tornado. It is in this sense, therefore, that the concept of contexts was employed as an analytical dimension guiding this research.

Conditions

The understanding of emergent social phenomena also requires knowledge of those immediate and particular conditions which contributed more specifically to the actual development or crystallization of the collective behavior. Thus, while the concept of context refers to those more antecedent or underlying conditions which affect both the development of and characteristics manifested by an instance of collective behavior, the concept of conditions shifts the analytical and research focus to the more immediate precipitants of the behavior (for an illustration of the way in which these two sets of determinants are often employed in the field of collective behavior, see Smelser, 1963). In seeking to discover the more specific conditions which generated the emergence of the new and emergent mental health system, our research was heavily influenced by the general systems perspective (van Bertalanffy, 1968; Buckley, 1967). The system frame of reference views the dynamics of behavior as being determined by the system's own internal dynamics, by processes occurring in its external environment, and by the interaction between the two. Thus, in an effort to uncover the particular conditions which contributed to the emergence of a new mental health delivery system in Time Two, our research sought to determine those factors both internal and external to the system which were operative at the time of the crisis.
Characteristics

Prior to seeking an explanation of any set of social phenomena, it is necessary to describe and analyze systematically the characteristics of what it is that has to be explained. As was discussed in Chapter I, most of the standard approaches to collective behavior identify or characterize the behavior in essentially social psychological terms. However, the emergent entity which this study set out to describe and explain was truly collective in nature. Furthermore, as was stated before, and as will be described in detail later, the delivery of mental health services following the Xenia tornado was, for the most part, a system, rather than an organizational activity. Therefore, the concept of system was taken as the basic unit of analysis, although the extent to which system-like qualities were actually manifested by the emergent collectivity was left as an empirical matter. However, as a starting perspective certain notions taken from the general systems framework were used in organizing the research and in delineating and analyzing the characteristics exhibited by the collective behavior response, or Time Two emergency mental health system.

The Research and Analytical Framework

As is the case with any research problem, there are a number of theoretical vantage points from which the analysis and explanation of the emergence of the new disaster-related mental health delivery system could be undertaken. All have disadvantages as well as advantages, and no single perspective fully answers all questions nor exhausts all the data. Our choice was dictated by our assessment of which framework had the most advantages for our purposes.

Thus, this study started out by viewing the Time Two emergent mental health system as an instance of collective behavior. The search for an explanation of the phenomena was guided by two key assumptions about the characteristics and determinants of collective behavior discussed at greater length in Chapter I. These are the following: 1) collective behavior is truly collective in nature which means that the characteristics of collective behavior must be delineated in truly sociological terms; and 2) because the generic properties of institutionalized and collective behavior are similar (i.e., both are predicated on social organization), then collective behavior can be analyzed and explained with the same general models used to account for institutionalized behavior. It follows from these two premises that a major objective of our research was to develop a consistently sociological
framework to describe and analyze the phenomena at hand. As already indicated, the study began with the notion that the delivery of mental health services in Time Two involved the coming into being of a new and emergent system. In fact, from the very outset of our study, field workers observed that the delivery of mental health services in the disaster situation was defined by the participants as a "system," rather than an organizational problem. In order to make clear the full implications of starting from this vantage point, our discussion turns now to an examination of the concept of system and the ways in which an open or general system perspective was employed in the research.

The Concept of System

There are several fundamental reasons for using the general perspective involved in the concept of system as a basis for our research. For one, it is a point of view which has come in recent years to guide a wide range of scientific theory and research (Laszlo, 1972: 10-15). This not only holds true in the biological and psychological sciences (Miller, 1965), but the social sciences (Buckely, 1967) also have increasingly conceptualized their basic phenomena in open system terms. More specifically, in the field of sociology, the general systems approach has been applied to a range of organized social behavior including everything from complex bureaucratic agencies (Thompson, 1967) to emergent groups (Klapp, 1973) and other forms of collective behavior (Klapp, 1975). In fact, approaching formal organizations as open, general systems is certainly rather standard in sociology today (Haas and Drabek, 1973). However, less often have complexes of groups or organizations been viewed and analyzed as open systems as is done in the present study.

Still, the growing prominence of the general system perspective is obviously not alone a sufficient reason for employing this orientation to the research problem at hand. The second reason which compels our use of this approach is to be found in the nature of the concrete empirical phenomena on which this research focuses. In the past decade there has clearly been an increasing emphasis in this country on establishing a specifically labeled systems approach to the providing of health care services (Sheldon, et al., 1970). The influence of this orientation was first felt in the organization of public health care services, in fact, as early as 1945, through the recommendations of a study, Local Health Units for the Nation, which represented the view of the American Public Health Association (Emerson, 1945). The thrust of this report, and the federal and state legislation which it subsequently generated, was the re-organization of traditional public health departments around a systems model of service delivery. The departments were to act as planning and coordinating units for local comprehensive health care
systems comprised of both private and public, as well as preventive and curative health organizations (see Lee and McLaughlin, 1970).

The passage of the Community Mental Health Centers Construction Act in 1963 sought to establish the same sort of system approach to planning and service delivery in the mental health area by setting up comprehensive networks of mental health care facilities throughout the county. The significance of the systems approach for the community mental health center idea is found in its emphasis on the need for an increase in interaction and interdependence between the mental hospital and other care-giving organizations in the community in which it exists, the overall aim being to increase the interpenetration of traditional organizational boundaries (Baker, 1969: 403). For example, central to the community mental health center notion is the idea of continuity of care, an objective which requires not only interdependence and boundary permeability between the various subparts of the center, but also between it and other agencies in the larger community care-giving complex. Therefore, from the very beginning of the community mental health center movement, there was a tendency to use a wider referent for the term "system," than single organizations. In fact, the system point of view in the mental health area has led to an increasing emphasis on even higher levels of organizational aggregation. For example, Schulberg and Baker (1970: 438) define the larger community mental health care-giving system as "a set of community agencies directly or indirectly related in a causal network, so that the actions of one component affect the capabilities of others in meeting community mental health needs." It should therefore be clear from this statement that the concept of system is becoming deeply rooted in the mental health area and, as it is used, refers not to the level of a single organization but to that of a complex network of interrelated groups and agencies.

Of course, while it is certainly commonplace today, if not almost faddish, to speak of medical care or mental health delivery systems, it is nevertheless rare that the user has reference to the full "technical" meaning of the concept of system. In actual fact, no matter what terminology is used to refer to any particular network of organizations, whether or not these social units actually constitute a system is problematic and can only be established through empirical inquiry. Nevertheless, the focus of our study is on what were implicitly if not explicitly designed to be real open systems. But the extent to which such a model of service delivery is empirically realized is entirely another matter. Furthermore, the study has been approached through the use of an open system point of view or analytical scheme. However, the real and conceptual systems need not necessarily be isomorphic. But science advances as isomorphism increases between a theoretical or conceptual scheme and objective findings about real or concrete systems (Baker, 1970: 11).
There was a third reason which also suggested the necessity and value of thinking of the delivery of mental health services as a system response. Previous DRC research has suggested that viewing any relevant response, emergent or otherwise, as a part of a system response forces one to consider all the social units that might be involved in providing a service, and not just self-selected or formally designated units. For example, the National Weather Services as a part of its legal responsibility issues warning messages about certain kinds of disasters in American society. However, there is considerable variation in the actual warnings that reach the general public. This is because different mass media components (as well as certain emergency organizations) play a crucial role in the transmission of such messages, delaying, selecting, and screening out many (McLuckie, 1970). Thus, to fully understand the delivery of warnings it is necessary to go beyond the activities of the National Weather Service, the self- and legally-designated entity for issuing warning messages. This is because clusters of other organizations, not formally designated as parts of the warning process, are also involved. Thus, treating the issuing of warnings, or for that matter the delivery of any services, as a system rather than organizational response at least insures that some attention will be given to all the social entities that might be involved in the delivery of such services, whether this is formally or otherwise recognized.

The final reason for using the open system theoretical point of view is that, as other DRC research has shown, the characteristics and subsequent effectiveness of almost any type of disaster response is considerably dependent on how well the system that is involved (be it medical, political, etc.) responds as a whole. Take, for example, the matter of how medical casualties are handled in a disaster. Generally speaking, this is less a consequence of how well individual hospitals respond than it is of how capable the community medical care system as a whole is of coordinating its efforts to achieve a relatively adequate distribution of the casualties to the various hospitals or other medical facilities within the local system. (For a general descriptive account of hospital responses in disasters, see Quarantelli, 1970a; for an analytical treatment, see Taylor, 1974.) In other words, the relationship between the different subunits or clusters of a system, which is a system property, is a key variable in determining the overall nature and the effectiveness of a system's response to crisis. Thus, as Emery and Trist note, a system perspective seems the most appropriate approach to use to analyze a set of phenomena whenever "the phenomena under study--at any level and in any domain--display the character of being organized, and when understanding the nature of the interdependencies constitutes (part of) the research task" (1965: 21).

To summarize, it was not any one of the above factors alone which led to the use of a system perspective. But, taken together all of these indicated that thinking in terms of a system would be the most appropriate and productive way of approaching our research problem.
However, the term system has been conceptualized in a variety of different ways in the social science literature. It is instructive therefore, to examine the general perspective involved in the concept of system as it is used in our research and to show briefly how it differs from other system orientations.

The concept of system has been employed in science for hundreds of years to indicate the idea of a conglomerate of parts. But what is new about the usage of the system concept, as Ackoff (1959: 6) has pointed out, is the "tendency to study systems as an entity." In fact, the increasing popularity of studying the whole system--i.e., the units in combined interaction--represents a rather significant reversal of the historically nominalistic and reductionistic tendencies of American sociologists. (For the latter see Hinkle and Hinkle, 1954.) The predominance of this general orientation has traditionally led sociologists to seek explanations of social phenomena primarily through analyzing complex structures into component simple units, rather than as wholes. The new system orientation in contrast emphasizes the basic Gestalt-like premise that social phenomena should be approached as irreducible wholes.

But beyond this emphasis there are considerable differences in the analytical models evoked in system analysis. In general, however, the two most fundamentally different system models currently employed in sociology are: 1) the closed or classical system model; and 2) the open or general system model. The closed system model (sometimes referred to as the natural system or functionalist model) represents the earliest attempt to build a system theory. In general terms, this perspective seeks to analyze primarily the internal processes or structures in systems and to establish relationships between these parts and the whole (e.g., see Parsons, 1951, 1961). It is not necessary for our purposes to discuss the closed system approach in any great detail. However, it is crucial to point out the most important feature of this model, and the one that has had the most far-reaching implications for the types of analysis it has generated. This is its almost exclusive concern with the internal processes or structures of an organization or system, especially its emphasis on those equilibrating or adaptive mechanisms which allow a system to maintain internal stability, integration, and harmony and to avoid change, disintegration, and disharmony. This makes the closed system perspective to social analysis fundamentally static (Dahrendorf, 1959).

It was von Bertalanffy (1950) who first demonstrated the importance of openness versus closedness to the environment as a means of differentiating living systems from nonliving or physical systems. Simply stated, an open system is defined as one in which there is a continuous inflow of resources from the environment into the system and a continuous outflow of products of the system's action back to the environment. Thus, in contrast to a closed system which is viewed as
dependent mainly on endogenous or internal system factors for its
growth or survival, the growth and survival of an open system is
thought to depend upon its exchange with the environment. Therefore,
an open system analysis is concerned not only with the internal pro-
cesses of the system, but also with external dynamics as they relate
to system structure and functioning. Or, as one system theorist puts
it, in describing and analyzing open system phenomena "the theorist is
thus forced to concentrate his attention on variation both in the organ-
ization and in the environment, since the organization-environment
perspective requires one to look at both sides of a relationship to
understand or predict an outcome" (Aldrich, 1971: 282). As a result
therefore of the continual penetration of a system's boundaries by
forces and changes in its environment, contradictions, variations,
and changes in the system are seen as normal and continuous. Thus,
unlike the closed system perspective, the open system approach views
systems as dynamic and continuously open to change as a consequence
mainly of interaction with environmental factors.

The Open System Model

While this discussion of the open and closed system models has
necessarily been brief, it nevertheless serves to point out the most
fundamental way in which the open system model underlying this re-
search differs from the closed system orientation which has tradi-
tionally prevailed in sociology. Our discussion turns now to a more
in-depth examination of the open system model, generally referred to
as general systems theory, and the basic concepts and processes it
advances to describe and understand system behavior. To start out,
it is important to emphasize that one of the primary objectives of
the general systems perspective elaborated by von Bertalanffy (1968)
was to develop an overall conceptual framework or body of theoreti-
cal constructs which would integrate all of the various sciences.
This was to be done through discovering basic principles of organiza-
tion which would describe and analyze many kinds and levels of living
organisms not only in biology (von Bertalanffy's own field of interest),
but in the social sciences as well. The following statement by Rapoport
summarizes well the objective of general systems theory in this regard:

A whole which functions as a whole by virtue of the
interdependence of its parts is called a system, and
the method which aims at discovering how this is
brought about in the widest variety of systems has
been called general system theory. General system theory
seeks to classify systems by the way their components
are organized (interrelated) and to derive the "laws," or typical patterns of behavior for the different classes of systems singled out by the taxonomy (Rapoport in Buckley, 1968: xvii).

Before proceeding to discuss the application of general systems theory to our research, it seems important to ask the question: Is general systems theory really a theory? Generally speaking, the term theory has undoubtedly been overused in recent years. In fact, some scientists are increasingly reluctant to apply this term at all (Caws, 1968). More specifically, with regard to the use of the term theory to describe the general systems orientation, it is significant that the founders of the Society for General Systems Theory later changed the name to the less pretentious Society for General Systems Research (von Bertalanffy, 1968: 15). It seems that the advocates of general systems theory do not even themselves purport to have developed a theory in the strictest sense of the term. However, the approach does intend to offer a theoretical framework including a set of useful global concepts and gross working hypotheses for understanding and describing many kinds and levels of system phenomena. To describe the general systems approach as a framework, a meta-theory or a model in the broadest sense of the term, is altogether more accurate (although to remain consistent with the literature, references will continue to be made to general systems "theory"). At the moment, the formulation remains a somewhat content-free conceptual framework within which any number of substantive theories may be inserted. Consequently, for a general or open systems model to have explanatory power, it must be adapted to each genotypic category of phenomena to which it is applied (Katz and Kahn, 1966: 452). Thus, although our research starts out from a general or open systems perspective, it seeks through a qualitative inductive strategy to add substantive specification to the framework in order to understand and describe the social phenomena at hand.

The basic key to general systems theory lies in the specific types of concepts and processes it uses to describe and analyze the behavior of systems (Young, 1964). It is to these concepts that one must turn in thinking about the application of general systems theory to any particular research problem. Therefore, our discussion moves now to a direct examination of the basic concepts of the general system approach in order to demonstrate their application to our research problem. The abstract notions from the system approach are briefly discussed before they are applied to the social phenomena that is our concern.

The concept of system in general systems theory (von Bertalanffy, 1967: 69-73) implies a whole with characteristics not reducible to the properties of the individual components (Berrien, 1968). The components in turn have properties specifically due to their being parts of a larger whole (Buckley, 1968: xxiv). For example, they are typically
differentiated in terms of specialized functions. Obviously implied in the concept of system is the notion therefore that there are parts or units which are organized or related in some way but are not necessarily integrated. (For social phenomena this means as Turk 1973: 6 has noted, that the components may be linked or related through partial conflict, as well as by accord). Even so, the structure or relatedness of these components or parts is seen as dynamic, rather than static. That is, the structure of a system is to be found in the interrelated activities or patterns of behavior which make up the domain of the system, rather than in some physical or abstract arrangement of things. Thus, in actual fact a system so described has no structure except through its functioning (Miller, 1965: 204-206).

As mentioned before, the types of systems analyzed by the general systems perspective are open systems. They cannot survive in isolation. Subsequently, it is assumed that the whole has to adjust continuously to factors external to itself -- the social environment -- as well as to its own internal dynamics or interrelationships between its parts (Lawrence and Lorsch, 1967a). However, to apply the term system implies not only system-environmental interdependence, but a degree of system-environmental independence as well. In other words, to exist as a distinct entity, a system must have and maintain some discontinuity with its environment. A system therefore has at least some sort of boundaries, although these are ultimately dynamic (von Bertalanffy, 1968: 215). Nevertheless, these boundaries function to separate the system from its environment on the basis of discontinuities in patterns and clusterings of activities and interaction. Finally, a very important concept in general systems theory is the principle of feedback a notion derived from cybernetics. In simple terms, the principle feedback refers to a process through which a system monitors its environment and thereby is able to correct for its own malfunctioning relative to changes in this environment. Thus, it is the feedback process which enables a system to adapt to environmental changes.

Before leaving this abstract discussion of general systems theory it is necessary to point out a number of mistaken notions implied in the concept of system that this perspective and therefore our research seeks to avoid. First, the concept of system does not necessarily refer to an all-or-none phenomenon with absolutely clearcut boundaries or domains. As Turk has noted "a system does not always occur and... when it does eventuate it does so by degrees" (1973: 6). Similarly, the concept of system does not necessarily require that the relationships between components be highly integrated or harmonious. As many system theorists have emphasized, "social units linked to one another through conflict can constitute systems" (Turk, 1973: 6).

In general, the above ideas comprise the core of the general systems perspective. How then was this set of theoretical ideas applied to the research problem at hand? The study started from the perspective
that in Time One the delivery of mental health services in Xenia was provided by a system. However, matters such as the nature of the whole, the composition and interrelationship among the components, and the dynamic adjustments and relationships between the system and its environment were to be established by empirical inquiry rather than to be taken as given. In other words, beyond the existence of a mental health delivery system in Xenia, an organized pattern of some kind, little else was assumed.

In order to describe and analyze the characteristics of this system, three concepts were used. These are the concepts of components, domain, and boundaries. Components has reference to the parts or elements involved, that is, the organizations or agencies comprising the system. Domain refers to what is done for whom, the activities engaged in by the components of the system for various categories of clients. The concept of boundaries has reference to the system's relationship with its environment and thus was used to indicate both the relative degree of interdependence and independence exercised by the components in carrying out domain relevant activities. Therefore, in analyzing the characteristics of the Time One mental health system in Xenia, it will be demonstrated that, as a result of a certain sociohistorical context, the established system had a particular set of components which operated within a particular domain with a relative degree of independence. But these system characteristics can and did change as a result of new conditions, as they did from Time One to Time Two. Thus, after the tornado in Xenia, in Time Two an altogether new and emergent mental health delivery system came into being which had a different set of interacting components operating with a relative degree of interdependence and independence in a new and different domain.

Thus, to recapitulate, in describing the characteristics of the Time One system, it is the established system which is to be depicted, whereas the account of the Time Two system will be characterizing the emergent system (see the diagram earlier on p. 22). The research seeks to empirically determine the nature of the components, domain, and boundaries of the Time One system and the dynamic factors which account for the different set of characteristics manifested by the Time Two system. What is important about the concept of system is that it does imply some sort of whole whose components have to adjust to one another, the whole, and the environment of both. This, therefore is the general perspective used in seeking an explanation for the coming into being of the new and emergent mental health system. The next section discusses more specifically the set of theoretical ideas used to explain the shift from the established to an emergent mental health delivery system.
The Concepts of Demand and of Capability

To indicate that a system can be depicted as having components, a domain of operation, and boundaries, and to say that these characteristics changed between a Time One and a Time Two period, is purely a descriptive exercise. It offers in itself no explanation either for the existing or emergent system characteristics. An explanatory principle, or better still, some sort of dynamic model is necessary to account for these phenomena. In this section, the model used to advance this objective is set forth.

In abstract general systems theory it is the general principle of feedback which largely explains the dynamic characteristics or collective adaptations of systems. Through the process of feedback, namely information about the effects of its own actions and the actions of other elements in its environment, a system makes changes either in its own characteristics or within the environment itself in order to ensure its survival. Implicit here is the key assumption that what generates collective adaptation is the necessity for a system to maintain some degree of co-alignment with its environment.

To explain the nature of this co-alignment and therefore the processes which trigger system adaptation, when applied to the specific social phenomena that is our concern, it is necessary to introduce a second set of theoretical ideas, specifically the concepts of demand and of capability. These concepts are not original with our research. Rather they are ideas deeply rooted in DRC research, being among the first used in DRC's earliest studies of disaster responses (e.g., see Haas and Quarantelli, 1964; also see Haas and Drabek, 1973, for a more recent and systematic discussion of these ideas).

The significance of the concepts of capability and demand is in the relationships between them. These form the elements of a dynamic model for understanding system changes or adaptation. The major premise of this model is as follows: it can be assumed that under normal conditions, the capability of a system exists in a dynamic interrelationship with the demands upon it, such that its capability is roughly equal to the demands placed on it. Or, put more simply, to the extent that systems persist, there is a relative balance in their demand-capability ratio. All systems are subject to demands. The demands are usually a combination of actual and perceived (or self-imposed) requests or commands for actions, services, or whatever the system's output may be. Systems attempt to meet demands through their capabilities. In general terms, the capability of any given system consists of the resources (i.e., the materials, funds, information, expertise and personnel) that could be mobilized to meet the demands made on the system. Thus, if the demands and capabilities are in relative balance -- and they never are totally equivalent even in normal times -- the system persists.
It should, however, be pointed out that by assuming that systems exhibit a dynamic equivalence between capability and demands, it is not meant to imply that what always exists is necessarily the optimum system state. Instead, the most important premise suggested by this model is that as the demand-capability ratio of a system becomes more grossly at variance, such as during large-scale disasters or other crisis situations, there are likely to be outcomes for the structure and functioning of the system. This latter premise serves as the major explanatory principle of our research.

Starting from this perspective, the study therefore began by looking at the demand-capability ratio of the Time One mental health system in Xenia. That is, an empirical examination was made of both the demands for mental health services which existed in the community prior to the disaster, as well as the capability the system had to meet these demands. The very existence of a functioning system in Xenia was an indication that there was some relative balance between demands and capabilities. However, as it happened, both demands and capabilities were in rapid flux in the weeks just prior to the disaster, thus having a significant effect on the mental health services the system was able to provide after the tornado hit. Nevertheless, when the disaster occurred, there was a relatively balanced demand-capability ratio in the mental health delivery system in the Xenia area.

A disaster, or any other major crisis situation, can affect the demand-capability ratio of a system in a number of ways. Such an event can either increase or decrease system demands and/or increase or decrease system capabilities, with four logical combinations possible, to wit:

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In the face of the different combinations possible (and in its research into hundreds of disasters, DRC has observed all of the above possibilities for different types of organizations and systems), there are several possible outcomes for the system so affected. The system can collapse, generally maintain its Time One pattern, or change in some way. The first possibility, collapse, is a very rare outcome, although it does occasionally happen. If the demand-capability ratio becomes too unbalanced for whatever reason (that is, whether it be the result either of too many demands and/or too few capabilities), the system will be so
disrupted as to eventually collapse as a functioning entity. (For a discussion of the matter of organizational instead of system death, see Haas and Drabek, 1973: 290.) The second outcome, that of routine system functioning, is also possible but the research evidence suggests it to be less likely than the third (see Barton, 1970; Dynes, 1974). That is, most organizations and systems adapt to changes in their demand-capability ratio at times of stress or disaster by changing themselves in some way (Brouillette and Quarantelli, 1971).

It has already been indicated that, as a result of the tornado, the mental health delivery system in Xenia changed. The established Time One system was superseded for certain purposes by an emergent system in Time Two. This is another way of saying that as a result of the disaster, changes were produced in the demand-capability ratio of the established mental health system, thus eventually leading to the development of a new or emergent mental health system. It is the characteristics of this emergent system and the conditions responsible for this change in the system demand-capability ratio that our study partly attempts to depict.

The Concepts of Contexts, Conditions, and Characteristics and their Relationship to System Demand-Capability Ratio

What affects and what are the effects of changes in the demand-capability ratio of a system? Again this could be approached from several vantage points. This research started out by making the assumption that the demand-capability ratio of the Time One system was the outcome of its general socio-evolutionary context. However, this ratio was disturbed by the impact of the disaster. More specifically, as a result changes were produced in the demand-capability ratio of the established mental health system in Time Two. In other words, when applied to the Xenia situation, what is being said is that in Time One there was an established mental health system with a particular set of characteristics; i.e., it was made up of a particular set of components, operating within a specific domain, and with particular boundaries. This institutionalized delivery system existed with a more or less balanced demand-capability ratio, thereby allowing it to function on a day-to-day basis. However, as a result of certain post-impact conditions in combination with existing contextual factors, a new mental health system emerged which had a different set of characteristics; i.e., it consisted of a new cluster of components, had a different domain or sphere of operation, and a new set of boundaries.
To summarize, the conceptual framework which guided the data gathering and analysis for our research involved the concepts of system characteristics, of demand-capability, and of contexts and conditions. These concepts have been defined and the relationships between them have been indicated in this chapter. In later chapters these categories will also be used to order the description and analysis. Thus, in graphic terms, the analytical framework employed to describe, analyze, and explain the shift from an established to an emergent mental health delivery system is as follows:

```
T
I
M
E

The Socio-Evolutionary Contexts

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Demand-Capability Ratio

↓

Disaster Impact

Components, Domain, and Boundaries of
the Established Mental Health Delivery System

↓

Socio-cultural Conditions

↓

Demand-Capability Ratio

↓

Components, Domain, and Boundaries of
the Emergent Mental Health Delivery System
```

Figure 1: The Research and Analytical Framework

Implicitly, at least, this was the explanatory model used in gathering the data for this research; and, more explicitly, these were the theoretical ideas applied in analyzing the same data. As was indicated at the beginning of the chapter, this general conceptual framework was heavily influenced both by the collective behavior and general systems perspectives to social analysis. Because of the exploratory nature of this study it was appropriate to start with what amounts basically to a relatively undeveloped general and content-free conceptual framework.
For it was from the data itself that the more specific substantive components of the explanation were to be developed. Thus, to elaborate, the substantive aspects of what were treated as contexts and conditions at this point would be too far afield, since these constitute part of the findings generated from the study. Therefore these matters will be presented and examined in greater detail when the concepts of contexts and conditions are applied in Chapters III and V in analyzing the data. Having thus delineated the analytical framework used in gathering the data for this research, our discussion now turns to an examination of the methodological procedures and techniques employed in gathering and analyzing the data.

Methods of Research

The research techniques and procedures of qualitative methodology being used to generate theory are not well codified (Filstead, 1970: 6). However, to acknowledge this in no way detracts from the legitimacy of qualitative methodology as a source of either data collection or theory construction. It is simply to say that unlike traditional, quantitative, verificational research designs which offer a lock-step procedure for data collection, the methodology of qualitative research offers little by way of a systematic and agreed upon step-by-step procedure to guide the research process. This being the case, the conducting of qualitative research is therefore no simple task, for it embodies the somewhat different but simultaneous processes of making a "comprehensive, analytical, descriptive, and in-depth analysis of the data" (Filstead, 1970: 6). In other words, in conducting qualitative research, the primary methodological technique is the rudimentary process of developing and adjusting a framework of concepts to fit the study's data. The selection of the appropriate techniques and procedures of data collection and analysis are, therefore, determined by repeated reference back to the focus and research questions of the study. This highlights the fact that in qualitative work, there tends to be a continual blurring and intertwining of the operations of data collection and data analysis (Glaser and Strauss, 1970: 291). However, for ease of exposition, the techniques of data collection and data analysis employed in our study will be presented separately.

The Types and Quality of the Data Collected

The foci and objectives of the study had two major consequences for the duration and the scope of the data gathering phase. First, our
study had as its focus the description and explanation of a totally new or emergent form of collective behavior. Emergent groups simply do not fully crystallize or develop in short periods of time, nor do they necessarily exhibit the same set of characteristics throughout their existence. Therefore, to be able to fully describe and analyze the emergent phenomena, it was necessary to gather data throughout an extended time period, what eventually amounted to approximately 18 months. Second, the study started with the working hypothesis that the delivery of mental health services both before and after the Xenia disaster involved the behavior of a system, rather than independent organizations. But which agencies and groups constituted this system could not be assumed a priori, and had to be ascertained. Thus, in order to empirically determine the components, domain, and boundaries of the systems in question, it was necessary to gather data about the activities and relationships between a large number of mental health and mental health related organizations. Therefore, a substantial amount of data was collected on dozens of organizations primarily but not exclusively through the use of various field techniques during a period of about 18 months. The close proximity of Xenia to the DRC location in Columbus, Ohio, considerably facilitated this data gathering. Three DRC staff members were in Xenia within four hours after the impact and spent most of the night observing the emergency response. Since that first visit and until the completion of the data gathering efforts 18 months later, the author and primarily two other graduate research associates in dozens of field trips put in over 1,980 hours of field work alone in and around the community (or a total of more than 247 regular working days in the field). During this period, data was collected in several ways. Each of these is discussed briefly below, followed by an assessment of the reliability and validity of the data obtained.

Interviews

A total of about 300 mostly open-ended, in-depth interviews were obtained from personnel in over three dozen different groups and organizations. In light of the exploratory nature of the research, an open-ended questionnaire was most appropriate, since this format allows the greatest likelihood of serendipitous findings. Almost all of the interviews were tape-recorded, and a fair number were transcribed. The average length of the interviews was about two hours, except in the case of key informants where they ranged between six to eight hours, usually spread out over two or more sessions. In order to obtain longitudinal data, some persons were reinterviewed a number of times, in a few cases as many as ten times in the 18-month period of the research.
The highest priority, of course, was given to interviewing members of mental health or mental health related organizations primarily but not exclusively in Greene County (the location of Xenia) and Montgomery County (adjacent to Xenia, and the location of Dayton, Ohio). Interviews were conducted with organizational personnel in, for example, mental health centers, family service agencies, outreach programs, religious groups, senior citizens agencies, etc., and with individuals in positions ranging from board members and executive directors to social workers and from psychiatrists to volunteer telephone aides. In addition, persons were also interviewed from local agencies and groups not directly involved in the delivery of mental health services such as courts, police departments, disaster-related planning groups, and social service organizations. Most of these organizations and groups were selected on the basis of possible indirect involvement in or knowledge of the mental health services provided in Xenia both prior to and after the disaster. Furthermore, about ten percent of the interviews conducted were with organizational personnel from outside Greene and Montgomery Counties, but who participated in some way in the effort to deliver mental health services in relation to the Xenia disaster.

The interview guides were designed to explore two major dimensions: 1) the historical context of the delivery of mental health services in Xenia prior to the disaster; and 2) the development and nature of any emergent activities engaged in by mental health or mental health related groups in connection with the disaster. To tap these dimensions, two different types of interview guides were used, depending on whether the person interviewed was treated as a respondent or informant. (Copies of these research instruments are included as Appendix A and Appendix B respectively.) Respondents were generally asked to report and describe their own actions, attitudes, experiences, perceptions, etc., in their work and related behavior. Informants, instead, were used to obtain overall information about existing and emergent organizational structures, functions, problems, interrelationships, as well as any other general or ideosyncratic information which would be important in understanding the context of mental health service delivery in Xenia. (For a discussion of the informant role in interviews, see Dexter, 1970.) The same individual, of course, could have been, and, in a number of cases, was, interviewed both as a respondent and as an informant.

The overall quality of the interview data obtained was very high. Only two or three persons interviewed provided nominal cooperation, and only one official flatly refused to be interviewed. (In this case, most of the necessary information was easily gained from other sources in the same agency.) However, the majority of individuals were more than willing to offer detailed information. In fact, even with the presence of the tape recorder, most persons were quite frank and candid in their remarks, not hesitating to offer names of individuals and to indicate often times sharply conflicting viewpoints. Therefore, there seems little reason to question the reliability of the interview data.
Documents

Several hundred documents were collected from about three dozen organizations. Again mental health and mental health related agencies were the major foci of attention. Among the kinds of formal documents obtained were: annual reports, disaster plans, organizational charters and articles of incorporation, legislative and executive acts and orders establishing groups, written agreements with other organizations, manuals for staff personnel, tables of organization, application forms and handouts for clients, lists of criteria for qualification for services, financial and budget statements, after-action reports, logs, and minutes of meetings. In addition, a certain number of informal documents were also collected including unofficial and intraagency memos, off-the-record letters, handwritten notes, etc. While most such material was organization generated, in a few cases some items were produced specifically as a result of a request by members of the DRC field team.

The documentary data obtained was somewhat uneven in quality. Two reasons accounted for this. Some organizations, whether in Time One or Time Two, simply had very poor record keeping procedures. It was therefore the very rare agency that had written documents for almost every major official action taken. Many although not all of the groups that emerged in Time Two kept few records of their early operations, as might be expected. But even some of the older, well-established organizations did not always document in writing some of their most important activities. Along another line, certain formal documents seemed sometimes assembled for purely public relation purposes and bore little relationship to the reality of the situation, although such documents were not necessarily deliberately intended to be factually inaccurate. In a rare instance or two, some information was found in documents which simply did not correspond to what was known to be the case by the field workers from other more reliable sources of data.

Nevertheless, in general, the documentary material was relatively satisfactory for our purposes. All existing documents necessary for the research were obtained. Furthermore, the majority of the documentary material which could be compared with data obtained in other ways did prove reliable. The unevenness in the quality of the documentary material was more in the absence of some material rather than in its inaccuracy.
Statistical Data

Although the largest part of the data for this study was qualitative, a major effort was made to obtain as much mental health related statistical data as possible. By this is meant statistics on such matters as agency case loads; aggregate data on clinical and medical records from case histories; police and health department figures on illness, accident and suicide rates and referrals made to mental health groups; probate court records; and any other quantitative measures which could possibly be taken as indices of mental health problems. An attempt was made to get longitudinal data for these measures, going back as far as a year before the tornado, as well as for the 18-month period after the disaster. The primary reason for collecting this statistical data was to attempt to obtain relatively objective and independent measures of changes in the demand level on the established health system in Time Two.

While originally our intent was to obtain perhaps several dozen sets of statistics, this method of data collection was only partly successful. There were three reasons for this. First of all, statistical data were simply not assembled by a number of the organizations studied. Either because of their small size, lack of tradition, or degree of professionalization, many groups simply did not have quantitative figures on matters relevant to the focus of this study. Secondly, some groups did have statistical data available but these were obviously incorrect, either because they were assembled too long after the fact, or in one or two cases because figures were inflated to show the organization in a good light. Thirdly, some of the longitudinal statistics sought simply had not yet been completely assembled by the collecting agencies by the time our field work ceased.

Measured against the initial ambitious goal, the statistics obtained fell somewhat short. Nevertheless, a considerable amount of relatively valid and reliable statistical data was collected. In fact, some of the data was the first of its kind obtained in a disaster type of situation. In addition, the statistical data were particularly valuable as a means of determining in part the reliability of some of the interview and documentary material.

Participant Observations

The field workers, and more often than not this author, observed more than 120 public and private organizational meetings. These ranged from monthly and weekly meetings of local community mental health
and social service agencies to training and debriefing sessions for mental health workers. In instances where it was relevant and accepted, tape recordings were made of the meetings; otherwise, the field workers wrote synopses and summaries about the participants and contents of the meetings. A few meetings which might have been worthwhile attending were missed. Most of these occurred in the days right after the tornado before our study was formalized. However, after that time, particular emphasis was placed on attending those meetings involving the organization of emergent groups or activities.

While some of the meetings proved to be extremely valuable for understanding what was occurring many in retrospect did not prove very directly useful for our research purposes. Often the substantive information that was obtained was available in greater detail from other sources. Nevertheless, the observation of such meetings did prove to be a useful means of determining the reliability of other types of data, particularly those obtained from interviews and documents. Perhaps the most important function of the participant observation was that the presence of the field team members at such meetings helped greatly to legitimize the research, and enabled the making of personal contacts which later facilitated the obtaining of interviews, documents, or statistical data. Without question, these other sources of information would have been far less accessible if the participant observation phase of the data gathering process had been omitted.

Survey Data

By far the greatest amount of most valuable data for this study was gathered through field methods. However, a mailed questionnaire was sent to about 300 persons who in the aftermath of the tornado were reported by various sources to have volunteered their services to established and newly emergent organizations involved in the delivery of mental health services. The four-page mail questionnaire sent to these persons consisted of some closed-ended and some more open-ended questions covering the nature of their involvement in such activities, their attitudes and perceptions about these activities, the organizations with which they worked and their types and frequencies of interaction with other organizations. (A copy of the questionnaire used is included as Appendix C.) While it would have been preferable to conduct face-to-face interviews with all of these volunteers, the mailed questionnaire was designed after conducting a considerable number of interviews, since it was constructed to collect essentially the same material as the respondent interview guide. A total of 114 usable, filled-out questionnaires were received. What percentage this number is of the actual number of volunteers who participated is unknown to the researcher. But on the basis of other sources of information, there is reason to believe that
those who replied constituted the largest bulk of those most heavily involved in the volunteer effort in the mental health services area.

The questionnaire data was of good quality. Open-ended questions were well answered, and some respondents went out of their way to write accompanying comments if not letters elaborating on different points. The data as a whole furthermore served as a partial check on what officials reported about the activities of their organizations.

Having described the types of data collected and briefly commented on its quality, our discussion now turns to a more direct assessment of the overall validity and reliability of the findings obtained by the study. The customary distinctions made between these two terms can be succinctly stated as follows: 1) validity has reference to the truth of an assertion made about something in the empirical world; and 2) reliability addresses itself to the degree of consistency in the observations obtained from the various data gathering devices or techniques employed, such as interviews, documents, observations, questionnaires, and other instruments (Deutscher, 1970: 202). It is often assumed that when qualitative methodological procedures are employed, the problem of validity is considerably lessened, while concern over the reliability of the data is substantially increased (Filstead, 1970: 6). However, to obtain high validity does not necessarily mean that high reliability will also be found, since there is an asymmetrical relationship between the two.

Turning first to the matter of validity, the question arises, "How can it be known whether the study's conclusions are a valid reflection of the empirical phenomena studies?" This, of course, can never be known with absolute certainty. Becker (1970: 195) suggests that if most conclusions arrived at are based on the convergence of several rather different kinds of evidence, it can be assumed that the findings are relatively valid. Our study did use a variety of techniques and procedures as well as qualitative and quantitative data bearing on the research questions under consideration. The conclusions reached seemed to be relatively the same when all lines of evidence are assembled. This assures some degree of confidence in the validity of the findings. Also, the results were not inconsistent with impressions derived from the much more limited studies conducted elsewhere touching on the same topic. (See Chapter I for references to these studies.) Finally, many of the general findings are in line with what has been concluded, more or less, in some studies of organizational functioning or the collective behavior of emergent groups, albeit outside of a disaster setting.

However, in qualitative research validity is also supposedly affected by another factor, more so than in quantitative research. This is the researcher's position in the social structure studied. Although this variable should never be minimized, it is sufficient to state that the validity of this research was not influenced by this problem any more, and perhaps even less, than is typically the case. The fact that
part of the DRC effort was sponsored by a state regulatory agency to which many of the groups studied were officially responsible had both its advantages and disadvantages. On the one hand, this greatly facilitated entree and access to relevant sources of data. On the other hand, this made it even more crucial that the field workers emphasize their independence from the funding agency in order that their somewhat marginal position might be used to further rather than to hinder the research being undertaken. In general, it would appear there was more gain than loss, although this estimate has to be mostly a subjective judgement.

Turning to the question of reliability, the primary concern is whether or not the techniques or data gathering devices employed by our research yield consistent observations. Recognizing that qualitative studies are often accused of having low reliability and therefore poor replicability, several strategies were employed to enhance the reliability of the data. For one, multiple techniques or data gathering methods were used as cross-checks, rather than relying on the overall accuracy of simply one technique. For example, the participant observations served as a means for comparing the relationship between verbal statements made in the interview context and the actual behavior and actions of the same persons in a more natural social setting. Likewise, the reports of organizational informants obtained through interviews served as sources against which the factual accuracy of documentary and statistical data could be judged and vice versa. Furthermore, three additional cross-checks were used to ascertain the reliability of the interview data. The first was internal to each interview and involved treating the interviewee as both respondent and informant. The second was that of interviewing persons from various levels in a particular organization, therefore allowing cross-checks or comparisons between one interviewee's account of the same set of events with the accounts given by other interviewees. Finally, in some instances the same person was interviewed at varying times by different members of the DRC field team. For the most part, these various data collection techniques did yield consistent information. But when they did not, as was mentioned earlier in reference to some of the documentary data, the distorted and conflicting reports stood out almost immediately given the large quantity of different kinds of data collected. Thus, the fact that the data for this study was gathered through multiple techniques, but still reflected an overall consistency and convergence, leads to a greater degree of confidence in its reliability and, therefore, in the possibility that the findings of the study could be replicated by other researchers.
Data Analysis

As is typically true of qualitative work, there was no clear-cut line between the data collection, data coding, and data analysis phases of our research. (See Lofland, 1971 for a discussion of the merging of the two processes; also Schatzman and Strauss, 1973.) However, it is possible to pull out and describe a number of basic analytical operations which were carried out in a somewhat sequential fashion in conducting this research. What primarily distinguishes these phases of analysis from one another is that within each successive stage different types of conclusions were arrived at and put to different types of uses in the continuing research. To make the processes by which conclusions were reached and substantiated more accessible to the reader, they are discussed briefly below.

This study was first conceived as a result of information obtained by the author through participant observations of the activities and meetings held by mental health groups within a week to ten days after the disaster. On the basis of these observations the initial impression was formed that various local mental health organizations were attempting to forge out a unified or "system" response to the disaster. Furthermore, since this represented one of the first major attempts to undertake the delivery of mental health services in a disaster context, it was obvious what was being done in this regard involved the efforts of emergent groups and emergent activities on the part of existing groups from the very outset. As a result of these observations the research was thus launched with a few broad descriptive categories in mind, i.e., the concepts of system and emergent social behavior. In an effort to obtain further information about these initial impressions and to sharpen the descriptive focus of the study about a dozen unstructured interviews were conducted with key personnel from those mental health groups most centrally involved in the disaster response. At the same time, participant observation was continued at crucial organizational and coordinating meetings. These two sets of data were then analyzed in a rudimentary fashion.

On the basis of the information obtained from these observations and initial interviews about one month after the disaster, the two open-ended interview guides and a checklist of documentary material to be gathered were constructed as tools to utilize in collecting essentially descriptive data. (These guides have already been discussed and are included in the Appendices.) Shortly after this, the data collection process was fully launched and more complete and complex impressions gradually began to form. Notes were made while in the field and analytical memo writing was initiated in the office, with these being continuously filed and re-filed under various changing analytical categories. This therefore represented the beginning of the search for a viable conceptual framework, that is for concepts which were more analytical rather than primarily descriptive in nature.
Once the substantive components of the general analytical model were more fully specified, the data gathering thereafter focused more specifically on uncovering evidence in relation to the major analytical and explanatory components of the framework, i.e., the particular contexts, conditions and characteristics associated with the newly emergent mental health system and how these affected and were affected by changes in the demand-capability ratio of the Time One System. By this time a limited amount of quantitative data was also being gathered which would indicate changes in system demand-capability balance; this data was primarily used to assess the reliability of other kinds of data gathered. With the conceptual framework more sharply developed, the volunteer survey was then constructed about six months after the disaster in order to obtain a broader sample of the mental health volunteers than was possible through face-to-face interviews.

Once the data was collected, the developed analytical framework was then used as a guide to an intensive analysis of the total set of data. These included the interviews, a large number of which had been transcribed, the volunteer survey, documentary data, the material from the participant observations, and the various statistical figures gathered. While most of the analysis was qualitative in nature, relying primarily on descriptive categorizations, simple percentages were used to analyze the quantitative data gathered.

The analytical procedure employed is not without its limitations. One in particular is that the same data was partly used in generating the theoretical framework as was used as evidence in some sense for the same framework. However, the objective of our exploratory study was to generate and elaborate substantive theory, rather than to verify already existing theoretical ideas. As such, it is recognized that a different kind of empirical testing of the theoretical ideas generated by our research is a necessity.

What has been described above is, of course, only a brief summary of a process that was far more complex and oftentimes exceedingly trying than is communicated in these remarks. In fact, as is often the case in the reporting of the analysis of data, our retrospective reconstruction of the process probably imposes more order on the process than there was at the time the analysis was being undertaken. For example, all the false starts, dead ends, inconclusive analyses--typical of all research--are somewhat obscured by the reporting of a sequential order in the data analysis undertaken.

To summarize, this chapter has presented a discussion of the basic objectives of the research; the analytical framework from which the study was undertaken in order to meet these objectives; and the methodological procedures and techniques employed in gathering and analyzing the data for the study. It is necessary now to turn to the findings of the study. Our next chapter discusses the socio-evolutionary context surrounding the development of the mental health delivery system as
it existed in Xenia in Time One, including a description of the characteristics of the system and its relationship to the larger socio-cultural environment in which it was embedded at the time the tornado occurred.
1. These four concepts are discussed and illustrated in Quarantelli, Weller, and Wenger (forthcoming).

2. The findings from a recent study of six different incidences of collective behavior by Quarantelli and Taylor (1975) lend empirical support for this idea. In fact, according to the results of this study, even those forms of collective behavior which are typically viewed as more ephemeral can best be understood by viewing the social setting in which they take place as proactive, rather than reactive.

3. Most of the possibilities are probably self-evident except for an increase in capabilities after a disaster. Actually this happens more often than is realized. Organizations and systems increase their resources either through the activation of disaster plans or as a result of being provided extra resources by groups and agencies from outside of the impacted community.

4. There is one other possibility not discussed here. It is for a system or an organization to completely suspend operations after a disaster and to resume activities only in the later Time Two period. Many businesses, for example, close down in the first few days after a major impact. As a matter of fact, it is typical for the whole recreational-leisure system of a community to cease operations for days if not weeks after a massive catastrophe. (Dynes, 1974).

5. This is more complicated than the word supersede might imply. As will be demonstrated, the traditional or established mental health delivery system, after an abortive effort to provide disaster-related mental health services, continued to provide more or less its traditional kinds of services. It helped to spawn some new groups that eventually formed the core of the newly emergent delivery system.

6. For a discussion of the prevailing but unfortunate tendency of systems analysts to define and specify the boundaries of the systems they study even prior to conducting an empirical examination of the phenomena in question, see McLaughlin (1970: 233).

7. The bulk of the field work was carried out by a field team consisting of the author, who acted as field director, and two other graduate research associates from DRC. However, on a few occasions other members of the DRC field staff who have been systematically trained and are experienced in conducting field research assisted in the field work for this study.
CHAPTER III

CONTEXTS AND CHARACTERISTICS OF THE ESTABLISHED MENTAL HEALTH SYSTEM

This chapter, after an introduction, analyzes: 1) the socio-evolutionary processes or context surrounding the development of the mental health delivery system in Xenia up to and at the time of the disaster; and 2) the outcomes of these processes, or the characteristics of the mental health delivery system as it existed at the time the tornado struck.

Introduction

It may often seem as if new and different forms of collective behavior are brought about mainly by the occurrence of some specific event or social happening which represents a sharp contrast -- either through its uniqueness, its unanticipated nature, its undesirability, or whatever -- with other events in the larger social setting. This can be seen, for instance, in the emergence of the urban racial disturbances of the late 60's in various cities in the United States. In most of these cases, the emergence of riots, a form of collective behavior, was preceded by the occurrence of some type of critical event which acted as a catalyst for the disorders (see Kerner, 1968). For example, in Newark, it was the alleged police brutality involved in an arrest; in Detroit, an after hours bar was raided by the police; and in Watts, the event was an attempted arrest of a Black youth by the Los Angeles police. But to attribute the emergence of these instances of collective behavior solely to the specific incidents which occurred at a specific time and place would be to neglect other factors of equal, if not greater, importance. These include the general socio-cultural aspects, more specifically the social injustices experienced by American Blacks, which preceded these events. This background was as critical in leading to the emergence of the ghetto disturbances as was any specific incident, no matter how unjust or undesirable it may have seemed in and of itself. Therefore, in order to understand fully and explain the occurrence of the urban racial disorders, it is necessary to note not only the immediate precipitants of the collective behavior, but the underlying contexts or pre-conditions which were also operative in the situation (see Masotti and Bowen, 1968; Geschwender, 1971).

Disasters, almost by definition, are viewed as unique, unanticipated and undesirable events which generate new social conditions or
problems requiring some type of immediate action or amelioration. However, the generic factors contributing to the emergence of collective behavior in disaster situations are not unlike those discussed in reference to the racial disorders. In other words, the unique and immediate conditions created by a disaster do play a part in the development of new forms of collective behavior such as the emergence of relief groups, for example. However, these collective behavior responses cannot be understood solely by reference to the more contemporary disaster-induced conditions operative in the setting. Instead, in order to fully account for the factors which lead to the emergence of collective behavior in disaster situations, it is necessary to examine not only the immediate conditions generated by the disaster itself which serve as a catalyst for the emergence of collective behavior, but also to take into account the general socio-cultural environment or Time One contexts out of which the behavior developed. For example, in many societies and cultures around the world, particularly non-Western ones, it is highly unlikely that a major disaster or other large-scale catastrophe would generate any type of organized delivery of mental health services. This is because during normal times many non-Western societies offer very little by way of organized efforts designed specifically to attend to what are, in American society, termed "mental health problems." Therefore, this type of pre-disaster social context would not be conducive to the emergence of efforts to provide mental health services in times of disasters as well. In fact, as was pointed out in Chapter I, concern over the psychological well-being of victims of American disasters is actually a relatively recent phenomena itself, and as such requires its own explanation.

It follows, therefore, that to understand better the conditions responsible for the emergence of the new disaster-related mental health system in Xenia and the characteristics it manifested, it is necessary to have knowledge both of the Time One characteristics of the mental health system and the larger socio-cultural contexts influencing its development. An attempt will be made to show that as a result of its general socio-evolutionary context, the Time One or established mental health system had evolved a particular set of characteristics allowing it to operate with a relatively balanced demand-capability ratio. But to understand the way in which the disaster affected this ratio requires knowledge of the prior, or Time One, demands upon the system and the capabilities or characteristics it had evolved to meet those demands.

This chapter, therefore, presents the research findings or more substantive aspects of what were found to be the contexts, characteristics, and capability-demand ratio associated with the established mental health system. In so doing it will be demonstrated that the system which emerged after the tornado was not a spontaneous and wholly unexpected phenomena, but was a continuous outgrowth of Time One patterns and trends. Thus, the analysis of the pre-impact contexts and characteristics of the mental health delivery system in Xenia will contribute substantially to the explanation of what, how and why a certain
kind of emergent mental health delivery system came into being in Time Two. In graphic terms, the analysis presented in this chapter concerns the substantive findings in relation to the following analytical dimensions of our study.

**T** Socio-evolutionary Contexts

**I**

**M** Demand-capability ratio

**E** Components, Domain and Boundaries of the Established Mental Health Delivery System

The first section of the chapter examines the larger socio-evolutionary context, particularly the community mental health ideology, within which the established mental health system responded to the Xenia disaster. It essentially provides selective background information -- and it does not pretend otherwise -- on the historical socio-cultural setting of the Time One mental health delivery system studied, the characteristics of which will be discussed in the second section of the chapter.

**The Context of the Delivery of Mental Health Services**

As stated above, any response to a situation cannot be understood solely in terms of the immediate conditions operative in the setting involved. This chapter therefore begins with a very general discussion of the idea or concept of community mental health. The ideological aspects of this orientation to mental health care are very important since this ideology sets forth not only the beliefs, objectives and purposes of the approach, but the ways in which the community mental health orientation is different from, if not directly opposed to, other more traditional views of mental health care. This ideology represents a
broad socio-cultural movement or trend in the organized delivery of mental health services in the United States. It thus serves as a larger and more general framework within which at least most public mental health delivery systems are increasingly urged to operate. In fact, the community mental health orientation not only underlies the national approach to mental health care as manifested in key legislation, but state and local groups have also attempted to implement it in actual practice.

Following a brief exposition of the community mental health ideology, our discussion then turns to an examination of how this ideology was specifically manifested in the establishment of community mental health delivery systems throughout the state of Ohio. This presentation provides a larger and more general context for understanding what, how, and why a certain kind of mental health delivery system was established in the Xenia area, centering around the Greene-Clinton County Mental Health and Mental Retardation Board (hereafter abbreviated as the Greene County system or Board, as appropriate to the discussion).

It is particularly relevant to discuss this context since certain patterns of program development, coordination, interagency relationships, service priorities, etc., which existed in the Xenia area derived largely from the way that community mental health services came to be generally structured in the state of Ohio. They did not stem, as was sometimes locally and otherwise believed, from any unique or special features of people or groups in Greene County, although this is not to deny that each locality does not exhibit its own idiosyncracies. Attribution of system characteristics to the specific actions of particular persons in a specific locality, while typical of American popular conceptions of social reality and change, simply ignores the weight of supra-individual historical factors in the development of social institutions. Systems are always partial products of both internal and external factors in their past, and the pre-tornado mental health delivery system in Greene County was no exception to this.

Thus, to the extent that the mental health related services delivered after the Xenia tornado were not spontaneous and unique, but were a continuous outgrowth of Time One patterns and trends, examining the contexts of the Greene County mental health delivery system will contribute substantially to understanding the mental health system which emerged in Time Two. The present is always part of the past. The latter must be known if the former is to be understood. What follows, therefore, is not an unnecessary resurrection of already forgotten historical details, but an attempt to present the larger and more general processes and contextual factors in Time One, the outcome of which considerably affected the stance and response of the mental health system in Xenia to the tornado, and, even more specifically, to the shift from an established to an emergent mental health delivery system.
The Ideology of Community Mental Health

The idea or concept of community mental health is of recent origin in American society (Hobbs, 1964; Folla and Schatzman, 1968; Dinitz and Beran, 1971). Although the roots for this approach to mental health care were set in the late 1940's and early 50's, the actual concept of community mental health was not formally introduced until the publication of the Joint Commission Report on Mental Illness and Mental Health in 1961. Following from the recommendations of this report, the community mental health approach to service delivery was then, as noted in Chapter I, formally established with the passage of the Community Mental Health Centers Construction Act in the United States Congress in 1963. Up to that time, however, a more traditional conception or approach to mental health problems had prevailed; perhaps the single most important element of this perspective was the largely Freudian derived medical model, or illness and curability interpretation of mental disorders (Fisher, Mehr, Truckenbrod, 1974: 11). But the community mental health notion differs in some major ways from this older, more traditional conception. Because of the pervasive influence of this perspective on the development of mental health care service delivery in the United States, and more specifically throughout Ohio, it is necessary to discuss briefly the basic set of principles and concepts included in the notion of community mental health.

Dimensions of the Ideology

Bloom (1973) has recently reviewed the history of the community mental health approach and has distinguished it from traditional mental health activities along several dimensions. The first dimension which differentiates community mental health from the more traditional clinical approaches is its emphasis on providing services in the community, or in natural social environments, as opposed to institutional settings. This is obviously the most crucial aspect of the entire approach, and, as such, determines other major goals and strategies of mental health services delivery.

A second characteristic is its stress on the total community as the legitimate target population for its programs, rather than on individuals who find their way into the clinics for treatment. Together, these two aspects of community mental health can be viewed as the application of public health concepts to the field of psychopathology.
A third emphasis of community mental health is on the prevention of emotional and psychological disorders, as distinguished from an exclusive focus on the therapeutic treatment of existing psychopathology. It is through this objective that the approach reflects a distinct turning away from what has been known as the "medical model" toward the "public health model" of service delivery (McGee, 1974: 35). Whereas the medical model is primarily one of treatment after a "disease" condition has occurred, the community mental health approach seeks to eliminate or prevent a condition before it can reach the clinical pathology state.

Consistent with this objective, the fourth characteristic of community mental health practice is its reliance on indirect services, such as consultation and mental health education, rather than solely on direct services. This strategy aims to develop mental health skills among persons working in other care-giving systems, such as the schools, churches, legal system, medical system and the like. The intent of this is to promote the development of skills among care-givers in these other systems which will allow them to deal more effectively with their clients, thereby ensuring that mental health intervention is provided to an increasingly larger population.

A fifth characteristic of the community mental health approach is an emphasis on innovative treatment strategies which facilitate providing mental health intervention to larger numbers of people more promptly than previously had been the case. In contrast, the traditional orientation has focused almost exclusively on providing long-term individual therapy to fewer clients. In this respect, crisis intervention (see McGee, 1974) and brief psychotherapy have emerged as the most influential new approaches to prevention and treatment (see Parad, 1973). However, this emphasis has also contributed to the myriad of intervention strategies currently utilized in the mental health field.

The sixth characteristic of the community mental health orientation is its emphasis on rational planning processes in the development of coordinated and comprehensive mental health programs and facilities. Ideally, decision making regarding mental health planning and program development is to be based on the systematic identification of community needs. In contrast, facilities had formerly emerged somewhat haphazardly, resulting not only in the proliferation of duplicated services and uncoordinated efforts in some localities, but in the total absence of mental health services in others. Moreover, frequently those services which did exist often failed to be based on the characteristics and needs of the particular communities in which they were located.

A seventh characteristic which distinguishes the community health orientation from traditional approaches is its use of different sources of personnel, i.e., the paraprofessional, or the indigenous mental health worker, instead of relying solely on staff from the traditional mental health professions. This has not only led to a rise in the utilization of trained volunteers in order to alleviate the critical
manpower strategies in the mental health area, but to the controversial belief that in some particular types of programs volunteers may actually be more effective than professionals (e.g., see McGee, 1974: 34).

The last two aspects of the community mental health approach are deeply rooted in the community action strategies which pervaded the federal social and welfare programs developed in the early sixties (Moynihan, 1970). This strategy assumed: (1) that those who have problems, whether they be poverty, illiteracy, mental illness, or whatever, know better what their problems are than outsiders, including experts; (2) that much human misery is actually the result of a sense of powerlessness and alienation; and, therefore (3) that those who have problems can eventually find their own remedies if community decision making processes are restructured so that power is more equally distributed. Given the popularity of the community action strategy among social and behavioral scientists and policy makers in Washington during the period of the early and mid-sixties, it was inevitable that this strategy would find its way into the developing community mental health orientation.

Thus, an eighth characteristic of the approach is "community control," which means that the mental health professional is no longer to be the sole source of data regarding the mental health needs of the community and the best ways to meet these needs. Instead, representative sectors of the community are to join with their local mental health center in identifying needs and proposing programs to meet these needs. Moreover, since presumably the center operates on behalf of the community it serves, its primary accountability for the effectiveness of its programs is therefore to the local community, i.e., to its clients, rather than to the standards of the mental health profession.

A final distinguishing characteristic of the community mental health orientation is in its identification of the sources of stress as lying within the social environment. In other words it is assumed that the social setting produces emotional and psychological disorders, rather than that the sources of psychopathology are altogether inside the individual. Following from this, the community itself is to be viewed as the patient, and the goal is to make communities the sources of health by affecting changes in the social systems in which people live (Caplan, 1964; Dumont, 1968). Not surprisingly, this strategy rather quickly becomes highly politicized in character.

To summarize, in the late 1960's when these principles of community mental health were emerging and becoming crystallized, they formed what may be thought of as "the new look" in the delivery of mental health services, an approach which was actually set forth as appropriate for designing almost any type of mental health or mental health related service. In fact, some have even described the emergence of this approach to mental health care as the end result of a social movement, more specifically a movement which was launched in opposition to the deeply rooted medical model which dominated mental health service delivery at that time. However, as is usually the case with radical
new approaches, the community mental health orientation described above remains largely an unrealized model. There is probably no center in the United States which fulfills all of the above conditions (Chu and Trotter, 1972). In actual fact, these concepts of service delivery have not only been slow to be accepted into community psychology and community psychiatry, but the illness and curability conception still predominates as the single most important element in the legacy of the more traditional approach to mental health care. Nevertheless, the influence of the community mental health orientation has been pervasive, even if in some cases it is only because of the opposition it has generated.

Ideological Attribution of Source of Mental Health Problems

It is clear that there is an implied, if not direct, criticism of traditional mental health activities in each of the preceding distinctions. But the last one, the basic source of mental health problems, is a particularly crucial element of the community mental health ideology, and also one of the most controversial. It relates to the models which are used in understanding pathology (Fisher, Mehr, and Truckenbroad, 1974). Up through the 1930's and early 1940's the psychiatric profession was largely influenced by the ideas of Freud and his followers who saw mental disorders as a disease process no different in quality from any other disease process. Thus, people displaying emotional and behavioral disorders or deviance were considered to be "sick" and therefore should be diagnosed, treated, and "cured" by the medical community.

There has been a long-standing debate along a variety of lines regarding the appropriateness of the so-called medical or disease model in trying to understand psychopathology. Criticism has been raised against this model, not only because of its failure thus far to locate in a systematic fashion the underlying abnormalities which account for most types of mental illness, but also because the therapeutic strategies or cures hailed as the solutions to the problem of mental illness have fallen short of the psychiatrists' optimistic projections (Deutsch, 1948). The failure to produce either diagnostic or therapeutic results has therefore led to a growing lack of support for the "illness and cure" definition of mental disorders. In addition, there was increasing evidence that a manifest source of a great deal of what is called psychopathology lies not inside the individual, but in the social setting. If the latter is true, it raises a plethora of moral and political implications.
However, what is most significant about the model of health and disturbance adopted is that it has profound implications for who provides the treatment, what types of treatment will be provided, and where or what settings the treatment will take place (Albee, 1968). A closer examination of this linkage is necessary. The basic assumption of the traditional medical model is that certain symptomatic behaviors, e.g., depression, anxiety, hostility, etc., are a manifestation of underlying disease processes. Further, these symptoms are thought to produce impairment in social functioning; that is, inadequate performance of one's social roles and other unpredictable and disturbed patterns of behavior. However, to the extent that this model is applied, the disturbed and ineffective behaviors are not in and of themselves worthy of much therapeutic attention, since it is presumably inner events, specifically the underlying disease, which produce them. Therefore, the treatment to be provided is essentially the search for and cure of the inner causes of the maladaptive behavior. As such, treatment tends to follow two generic patterns: 1) various somatic and largely medical techniques, such as chemotherapy, the convulsive therapies, and psychosurgery are applied with the aim of "curing" the pathological disease; or 2) complex psychological techniques are employed to "get inside the person's head" in order to uncover and cure the disease, such as long-term psychotherapy, hypnosis, elaborate diagnosis and testing, etc. Both of these techniques, whether more medical or psychological, follow from a medical model and are predicated upon a physician-patient relationship. That is, a person who experiences "psychic pain" goes to a licensed psychotherapeutic practitioner seeking services to gain insight and a cure for the underlying illness, but receiving, however, only a minimum amount of direct aid in dealing with more practical or everyday problems.

Throughout history, each major theory of psychopathology has been accompanied by a least one strategy for the treatment of the problem (Hobbs, 1964; Bloom, 1973). It is not surprising, therefore, that the emergence of an alternative view of psychopathology has served as the impetus for the community mental health orientation. In contradistinction to the traditional medical view, the proponents of the new approach assert a psychosocial model of health and disturbances. Psychopathology is seen as emerging out of a social setting and is, therefore, learned social behavior which is capable of being unlearned in a different social setting. This explanation of disturbed behaviors is close to being a direct reversal of the prior one. That is, in this case a dysfunctional social environment is seen as subsequently producing dysfunctional or disturbed behaviors. Perhaps even more important manifestations such as depression, anxiety, etc., are the result rather that the cause of disturbed or ineffective patterns of behavior. According to this approach the concept of an underlying disease is presumably totally irrelevant. To the extent that this model is applied, the treatment (or mental health intervention) tends to follow two primary strategies: (1) the reduction of sources of stress in the social environment or setting, such as destructive family relationships or other frustrations
and obstacles in a person's immediate life-space; and (2) the altera-
tion or unlearning of the disturbed behavior patterns which impair
social functioning. That is, in this case the ineffectual behavior is
the primary focus for treatment rather than the disease or its symptoms.
Following from this conception, the major alternative to the physician-
hospital-clinic-centered program was to be the community mental health
center. Further, the role of the mental health care-givers in providing
treatment was no longer to be a relatively passive and nondirective one,
but was to include active intervention in the social environments pro-
ducing emotional and behavioral disturbances.

According to Dinitz and Beran (1971), the most significant dif-
ference between the more traditional model of health and disturbance
and this new conception is that the latter is a "boundaryless system"
of deviance definition and management. That is, in contrast to the
more traditional medical model which had more limited goals and objec-
tives and operated within more focused and rigid boundaries, the com-
munity mental health ideology places almost no limits on who shall be
defined as in need of treatment, what types of treatment shall be pro-
vided, and by whom? What is meant by this is that practically any
version of disturbed behavior can be defined as a community mental
health problem; almost any type of individual and group activity can be
defined as potentially therapeutic in nature; and more and more almost
anyone, irrespective of their training, can be seen as a legitimate and
authorized agent to provide the treatment. In short, the community
mental health approach, according to these authors, has set for itself
the boundaryless goal of improving the total quality of life. This is
perhaps why the broader term "human services" is often used to describe
the community mental health orientation to service delivery (Schulberg
and Baker, 1970; Fisher, Mehr, and Truckenbrod, 1974).

Implementation of the Ideology

It took years of debate, substantial lobbying (Felicetti, 1975)
and detailed planning, following the recommendations of the Joint Com-
misson of Mental Illness and Health (1961) before the idea of the com-
munity mental health center started to be implemented. Then, in 1963,
President Kennedy delivered a landmark address to the U.S. Congress
proposing a national mental health program; and the same year federal
legislation was passed to authorize the States to construct comprehen-
sive community mental health centers. As for the centers themselves, it
was required that they provide five essential services: inpatient care,
outpatient care, emergency services, partial hospitalization, and consul-
tation and education. Eventually five additional services were to be
added: diagnostic services, rehabilitation services, precare and after-
care services, training, and research and evaluation. Moreover, the
unwritten intent behind this legislation was that mental hospitals as they existed at that time were to be virtually eliminated and replaced by the centers as soon as possible.

Although the emphasis on community rather than institutional care, the focus on a total community and on prevention, and the emphasis on long-term planning by the local community were controversial positions, the most innovative characteristic of the community mental health center was to be its comprehensiveness. This notion was taken to mean not only the prevention and prompt treatment of all types and degrees of mental disorders among the total population through the delivery of both direct and indirect client services, but also that continuity of care would be provided among all elements within the community mental health center. The concept of continuity of care is an extremely important one, for it has major implications for the social organization of the community mental health centers. Continuity of care is essentially based on the ideological position that there are many and various causes of maladaptive or disturbed behavior; subsequently, the treatment of these behaviors ought to be as diverse as their causes. Ultimately this means the implementing of a "team approach" so that continuity of care or treatment is assured both within the mental health centers as well as between the mental health center and other agencies or groups in the community. This, of course, requires the development of coordinating mechanisms between both the units in the mental health network and between this network and other organizations or networks of organization in the larger community. Although the language of "systems" was not often used (at least not at first), what most seemed to have in mind was the bringing into being of community mental health delivery systems, rather than just a congeries of related, but not integrated, agencies and organizations.

However, the problem of coordination was complicated by a major dilemma confronting the developing community mental health orientation. This concerned the personnel involved in implementing the ideology. Most had actually been trained in hospitals, university medical schools, and other educational and clinical facilities which embraced an individualistic disease-model orientation and clinical frame of reference. As would be expected, it soon became evident that a large number of these professionals, particularly those from the existing clinical disciplines like clinical psychology, psychiatry, psychiatric nursing, and psychiatric social work, would continue providing clinical services even though carried out in community-based settings (Sarason, 1974). More often than not, the community services therefore continued to be under the intellectual if not operational direction of psychiatrists with largely clinical and medical skills, rather than community-related experiences and skills. Thus, while it was evident that the new approach aimed to invest more in working on and in the social settings in which disturbed people are involved, and to count less upon the effectiveness of more isolated clinical strategies, what actually appears to have occurred was a transfer of the medical model to the community mental health center. As evidence of this, the 1971-72 NIMH Annual Inventory
indicates that, at that time, about 75 percent of total staff hours in community mental health centers was devoted to providing direct clinical services, while only about 5 percent of total staff hours was allocated to indirect services (i.e., programs in consultation, community development, mental health education, prevention, etc.).

In other words, as the community mental health centers were established it became increasingly evident that appropriate techniques for carrying out the objectives of the community approach still remained to be fully developed, legitimated, and disseminated among the involved professionals. Indeed, in the early 1970's there was a pervasive sense of uncertainty regarding just how the mental health professional operating in the new approach was to go about the somewhat elusive task of changing social systems, short of pushing for massive social reform movements or instigating full-scale revolutions (Wagenfeld, 1972). There simply were no traditional or fully accepted ways of how to go about altering the social order. Obviously when there are different units within a given network or system for delivering mental health services, when the personnel of these organizations and agencies have radically different and often conflicting perspectives on treatment strategies because there is no consensus on the procedures to follow, and when some of the key personnel in the system have backgrounds and training more suited to an older more clinical approach, there are likely to be serious problems of coordination (Robin and Wagenfeld, 1975).

However, despite the indicated difficulties and failures in actually implementing the community mental health ideology at the local operational level, this approach largely dominated at the federal level, specifically within the National Institute of Mental Health (NIMH). By 1973, 540 community mental health centers had been funded of which about 400 were in operation, and the number has since increased (Robin and Wagenfeld, 1975). Yet at the same time that the NIMH was striving to increase the eventual number of these centers to 1,500 by 1980 (Mauss, 1975: 352), the Nixon administration, between 1972 and 1974, proposed and made several drastic cuts in the budget of NIMH, including recommending a reduction and an eventual phaseout of the federal funding for community mental health centers established during the Kennedy era. Obviously this move had serious ramifications, more specifically the shifting of greater funding responsibilities for community mental health facilities to state and local governments. But, of even greater significance for this research, the federal cutback in funding had very direct implications for the role that has been played by NIMH in supporting the notion of the delivery of mental health services in large-scale disaster situations. This extremely significant contextual factor is discussed in the next section.
That there was strong commitment to the community mental health ideology at the federal level is indicated by the consistently high priority NIMH has placed on the concept of emergency mental health services, that is the provision of immediate mental health care and evaluation for persons in crisis on a 24-hour-a-day, 7-day-a-week basis. According to the Community Mental Health Centers Act each federally funded community mental health center was required to include an emergency mental health service as one of its five essential programs. The primary mechanism through which these services were to be delivered was defined by NIMH as crisis intervention. As Caplan (1964) and others have pointed out, crisis intervention basically involves frequent contacts with those being aided over a relatively short period of time; emphasis on contemporary realities or crisis events, rather than the historical antecedents of a particular difficulty or disturbance; rapid clinical assessment rather than long-term diagnosis; the use of paraprofessionals rather than the exclusive use of highly trained professionals; and helping those receiving aid to deal positively with the current situation rather than attempting to achieve a personality reorganization. (See Parad, 1965; Caplan and Brunebaum, 1967; McGee, 1974, for a more detailed discussion of the methods of crisis intervention.) Of all the new and emerging techniques of community mental health service delivery, crisis intervention represented, by far, the most significant departure from the traditional clinical psychotherapies. Naturally, therefore, it was the focal point of widespread and often bitter disputes. Nonetheless, NIMH was highly committed to crisis intervention as a major technique through which the shift from a medical model of service delivery to a more community oriented human services model could be implemented.

Indicative of this is the fact that from 1966-72, the NIMH through its Center for Studies of Suicide Prevention provided generous amounts of funding for research and training projects geared toward promoting the crisis intervention model in connection with the problem of suicide. Then, in 1972, sharp cuts were made in NIMH's budget by the Nixon administration. No justification existed for providing continued support at such a high level of funding for a problem area as specific as suicide. As a result, the Center for the Studies of Suicide Prevention was dissolved as such, but it was replaced by an expanded Section on Crisis Intervention, Suicide, and Mental Health Emergencies. Thus, what began as an interest in suicide eventually evolved into a broader interest in providing emergency mental health services as one form of an even broader range of crisis intervention services (McGee, 1974).

According to NIMH, emergency mental health services essentially had reference to the provision of crisis intervention services in connection with almost any type of personal crisis or disturbance.
imaginable, ranging from the death or serious injury of a close or significant other to being the victim of a large-scale major disaster or other catastrophe. But no matter what the specific nature of the crisis, what distinguished it as an "emergency" was the presumed need for immediate and direct intervention by mental health care-givers. Nevertheless, despite the continued emphasis placed by NIMH on the concept of emergency mental health services, the full development and implementation of strategies and techniques for delivering these services still remain to occur, and, in fact, at present is a relatively high priority within NIMH. However, in regard to the emphasis is granted to the delivery of emergency mental health services, one thing can be said with a relative degree of certainty. The broadening of the concept of emergencies to include a host of stressful personal events was what ultimately led to NIMH's interest in the delivery of mental health services in disasters.

At first, the role of NIMH in developing emergency mental health services in connection with large-scale disasters was primarily informal, consisting mostly of sponsoring conferences on the topic and providing consultation to local officials attempting to provide some type of mental health intervention in connection with the series of major disasters referred to in Chapter I which occurred starting in 1971. Only in the case of Project Outreach in Wilkes-Barre, Pennsylvania, did NIMH actually play a more formal and direct role. This was carried out through supplying both supervision and large amounts of funds, what eventually amounted to about $1,000,000, for the actual delivery of disaster-related mental health services. However, by the end of 1973, it had become evident that the NIMH aimed to develop some type of formal mechanism for delivering mental health services in connection with major disaster situations (McGee, 1974: 291). After considerable negotiations and debate between various federal agencies, on May 22, 1974, one month after the Xenia disaster, federal legislation was, in fact, enacted charging NIMH with the formal responsibility of assisting in the delivery of mental health services following major disasters. Regarding this, the Federal Disaster Relief Act of 1974 states in Section 413:

> The President is authorized (through the National Institute of Mental Health) to provide professional counseling services, including financial assistance, to State or local agencies or private mental health organizations to provide such services or training of disaster workers, to victims of major disasters in order to relieve mental health problems caused or aggravated by such major disaster or its aftermath.

Although this law was not actually passed until a month after the Xenia disaster, it nevertheless had a significant impact on what occurred
there, as will be demonstrated later. Set in this context the actions of NIMH officials in Xenia following the tornado will therefore be more readily understood.

The Institutionalization of the Ideology

The passage of the 1963 Community Mental Health Centers Act signified the triumph of the new community mental health ideology over the more traditional approaches. In fact, it was this development more than any other which indicated that the beliefs, objectives and ideology advocated by the community mental health movement had finally become institutionalized. Even so, criticism has not yet stilled. As stated before, many professionals in the field continue to cling with great vigor to the medical practice model (e.g., see Burrows, 1969; Leifer, 1969). Nonetheless, the dominance gained in the last decade by the new perspective is not only reflected in the widespread establishment of a large number of federally funded community mental health centers around the country, but also in the influence this approach has had on the development of mental health delivery systems at the state level. The trend in the past few years has been for the federal government to return a higher proportion of the funding responsibility for mental health service delivery to the states sooner than had originally been intended by the federal legislation passed during the Kennedy era. The fact that most states have, nevertheless, continued to embrace the community mental health ideology in establishing state-wide mental health service systems is a significant indication that the community mental health ideology, at least in principle, has indeed become institutionalized as an approach to mental health care in this country.

Having generally depicted the overall defining characteristic of the community mental health approach, our discussion now turns to a description of the nature and development of the community mental health delivery system in the state of Ohio. This provides a larger context for understanding the mental health delivery system existing in the Xenia area at the time of the tornado, since much of it is structured by state law. Equally as important, this discussion, like the one above, will introduce the larger socio-cultural context within which the established mental health system in Xenia responded to the particular conditions generated by the tornado.
The Community Mental Health Delivery System in Ohio

The community-based mental health delivery service system which has been established in Ohio differs in one major respect from what was recommended in the federal guidelines. The domain or kinds of services which are offered are actually almost identical to those specified in the federal legislation. However, the state has created a different kind of social organization to deliver the services, a local coordinating board with specialized subagencies, whereas the federal law envisioned one overall community mental health center. The difference is more than a semantical one between the words, "board" and "center"; it reflects a major difference in social organization.

The Law and Mental Health Services

The development of a community mental health delivery system in Ohio was started fairly soon after the passage of the federal legislation in 1963. It had its formal beginning in 1967, with the passage of the Community Mental Health and Mental Retardation Act, known as Amended House Bill 648. When the 648 law was enacted, there were 19 state mental institutions operated by the Ohio Department of Mental Hygiene and Corrections, which became the Ohio Department of Mental Health and Mental Retardation in 1970. Insofar as community-based services were concerned, there were only 38 outpatient diagnostic and treatment facilities within the entire state, and most of these were funded primarily as extensions of the state mental hospitals. In addition, 12 community mental health centers had been established under the 1963 federal Community Mental Health Centers Construction Act, prior to the 648 law. However, it was evident that the availability of comprehensive mental health services, as an alternative to institutional care, remained uneven across the state in spite of the existence of these 12 centers.

Therefore, in 1966, a task force composed of professionals, concerned citizens, and some researchers was formed to study and propose a model for establishing community-based mental health service networks throughout the state of Ohio. The findings and recommendations of the group eventually resulted in the enactment of Amended House Bill 648. This law mandated the establishment of community mental health and retardation service programs throughout the state in any county or combination of counties having a population of at least 50,000 people. In addition, for each service program, a mental health and retardation (648) board would be set up to act as the administrative and policy-making body for the county-wide, or joint county, services.
The 648 Board consists of local citizens appointed by the county commissioners and the Commissioner of the Division of Mental Health in the Ohio Department of Mental Health and Mental Retardation. In general terms, these boards are responsible for assessing the mental health and retardation needs of the community and for planning and implementing services to meet these needs. In addition, since under the law the state reimburses the county for only 75 percent of the operating expenditures of the service program, the 648 Board is also charged with raising the additional 25 percent of the local matching funds necessary for the provision of the community services. These may be raised either through a local tax levy or through allocations and contributions from other local public or private funding sources. However, while the local 648 Board performs the planning, coordination, funding, and evaluation functions of county-wide, or joint county, mental health service delivery, the actual delivery of services is the function of semiautonomous agencies which enter into contractual arrangements with the 648 Board. Only in unusual and temporary situations would a board itself directly operate service programs.

It was, therefore, through the establishment of this type of structural arrangement that the state of Ohio chose to implement the basic objectives of community mental health service delivery. By 1975, there were 54 such boards set up in the state, covering all of the 88 counties. In comparing the characteristics of the type of mental health delivery system proposed by the 648 law to those set forth in the federal act discussed earlier, the similarity is evident. The emphasis of the 648 programs is on the total community, on service in the community, on comprehensiveness, on prevention, on indirect services, on rational planning, on community control, etc.

At first, a sharp demarcation was drawn between the state mental hospital system and the community-based 648 programs, a strategy which was favored in the NIMH guidelines. On the one hand, the management, funding, and coordination of state institutions were retained by the state. In contrast, the state's function with respect to the community programs was more limited due to the authority which had been delegated to the local 648 Boards. That is, the state's role was primarily to coordinate and supervise the various community mental health and retardation service programs in order to ensure that they meet the overall objectives established by the 648 law. The Division of Mental Health in the Ohio Department of Mental Health and Retardation is responsible for this task, which includes defining and recommending minimum standards for programs and personnel, reviewing and accepting overall community plans for funding, along with conducting research and evaluation, licensing facilities, providing consultation and educational services, etc.

However, in 1973, a restructuring of the state mental health system occurred when the governor established official service districts within Ohio in an effort to decentralize all functions of state
government. The ten mental health service districts are relatively consistent with the other official state service districts for health, education, transportation, etc.; and the overall state plan was designed so that its districts coincide, more or less, with the newly established federal service districts. This move created an intermediate structure between the local community mental health and retardation boards and the State Division of Mental Health. While the total responsibilities of the district offices are still unclearly specified, their primary function is to promote and coordinate planning in the service districts, with a particular emphasis on coordinating the services of state institutions with those of the various community programs. This was deemed necessary because over the past ten years there has been a dramatic and continuous decrease in the resident population of the state institutions. But the concomitant development of alternate community and institutional services has failed to occur as rapidly. Therefore the primary intent of the restructuring was to facilitate comprehensive continuity of care throughout the total mental health system by removing the preexisting structural barriers imposed between the state hospital system and the community-based services. However, while this serves to further decentralize the state hospital system, thereby making the institutions more responsive to and better integrated with the community services, the district structure at least implies some loss of autonomy for the local community mental health and retardation programs.

In summary, an examination of the state mental health system in Ohio suggests that its goals and characteristics are directly traceable to the community mental health orientation. Even more specifically, the domain of the community programs, i.e., the services which are to be delivered, have been interpreted by the state to include the same services that community mental health centers are to provide under the federal law (i.e., inpatient care, outpatient care, emergency services, partial hospitalization, consultation, education, diagnostic services, rehabilitation services, precare and aftercare services, training and research and evaluation). Thus, as far as service priorities are concerned, the state law and guidelines clearly reflect the community mental health ideology of service delivery.

The Law and Mental Health Social Organization

There is one basic difference, however, between the community mental health programs developed under the federal legislation and the community-based 648 Board service system established by the state of Ohio. The domain of the system, or services delivered, in both cases are essentially the same, but the social structures or organizational arrangements for delivering them are rather different. This difference has profound implications for the nature and extent of the relationships or linkages between the units or components of the community mental health
service system which, in turn, affects the degree of coordination and integration exhibited among these units in providing mental health care.

At the outset it should be noted that the federal legislation was not altogether specific as to precisely what organizational form or structural arrangement the community service programs should take. But regarding one point the legislation was emphatic. Coordination between the service delivering units was an absolute necessity, since this was deemed essential for carrying out the entire concept of comprehensive continuity of care. In fact, to ensure coordination of services, the law specifically outlined regulatory requirements which would all but eradicate the boundaries between service units in the center by mandating that they cooperate in the willing exchange of clients, staff, and information regarding clients (NIMH, 1971). Implicit, therefore, in the federal law was the notion that the entire range of community mental health services was to be delivered within a single organizational framework. This idea was made even more explicit by the fact that the Community Mental Health Centers Construction Act provided grants for the construction and staffing of new facilities and, to be eligible for these grants, the center was required to provide all of the essential services. As a result, the structural pattern typically exhibited by the federally funded community mental health centers was that of a single organization. Under this type of structural arrangement there is, of course, a division of labor within the center based on the differentiation of roles and tasks (such as, e.g., the providing of emergency mental health services, outpatient treatment, indirect services, administration, and planning), but the multiple units do nevertheless operate within the same authority structure. To the extent that decision making regarding treatment priorities, policies, etc., is highly centralized in this type of configuration, the autonomy of the service delivering subunits is reduced. Of course, conflict and competition may occur between the units within this type of structural arrangement. But coordination of services is less problematic when the services are organized under a single authority pattern, especially to the extent that regulations, policies and procedures are standardized and formalized among the units. Thus, in short, what typically develops under the concept of the single community mental health center is an intraorganizational mental health delivery system in which all the specialized units are highly linked and integrated through a single authority structure.

There is, however, an alternative to this type of intraorganizational mental health delivery system, but one which still allows the range of required services to be provided within a single overall structural framework. It is the interorganizational system found in Ohio and some other states. A primary reason that Ohio adopted this type of structural arrangement was because there already were a number of public and private mental health agencies in existence in most communities around the state even prior to the passage of the 648 law. It seemed more practical and less duplicative to create a community-based service
system which would combine these existing agencies and possibly new agencies in such a way that the complete spectrum of comprehensive services could be provided. Therefore, the arrangement which exists in Ohio is one whereby the local 648 Boards contract for the delivery of services with semiautonomous organizations or agencies having their own administrative and policy-making boards. In other words, in this type of mental health delivery system the focus shifts from the level of the single organizational system to that of a complex network of interrelated organizations. This type of service system is, therefore, a multi-organizational one, because its differentiated service components are largely semiautonomous groups or organizations whose activities are linked in a service network primarily through the functions exercised by the 648 Board.

According to the state law, the 648 Boards have formal authority with respect to planning and the allocation of resources, including funding, the establishment of priorities for services, the evaluation of services delivered, and the development of linkages between the service agencies. But the law also allows for a degree of decentralization through the relative organizational autonomy of the multiple service delivery agencies. For example, the agencies more or less retain maximum discretion to alter their treatment strategies as long as they provide the basic services specified by the 648 Board. Given the continued diversity of perspectives regarding the models and techniques of mental health care, this is one way of assuring that a variety of different views and new and specialized treatment strategies will be retained. However, as Miller (1965) and Gross (1966) point out, when multiple and semiautonomous, specialized organizations with different goals and techniques are required to operate within the same mental health system, coordination becomes a strategic problem. Moreover, even if the agencies hold relatively consistent perspectives regarding models of service delivery, there are only limited resources for maximizing the objectives of all of the agencies while simultaneously providing the full range of comprehensive services. Therefore, in short, conflict is practically inevitable. In Ohio, it is a primary function of the local 648 Board to prevent and reduce this conflict by establishing various coordinating mechanisms to integrate the different components of the service system, such as instituting standardized policies establishing clearcut domains for the respective agencies, facilitating case conferences between workers in different agencies, etc. Nevertheless, due to the great amount of discretion and autonomy retained by the components of the system, the 648 Board structural configuration ultimately results in a rather weakly integrated system with all components nominally linked, but through conflict as often as by accord.

In comparing the characteristics of the intraorganizational community mental health center with the interorganizational delivery system existing in Ohio, it is evident that the advantages of one are the limitations of the other. Specifically, the latter arrangement is conducive to greater flexibility as a result of the routinization of change.
through mandatory and periodic planning; it facilitates a greater re-
sponsiveness to public views due to the opportunity for citizen par-
ticipation on the decision making bodies of both the agency and 648
Boards; it encourages a variety of divergent perspectives regarding the
models and techniques employed in treating mental disorders; and, accord-
ing to Whittington and Steenbarger (1970), it is more conducive to the
delivery of indirect services, such as community consultation and educa-
tion, than is the more centralized community mental health center. How-
ever, this more decentralized type of mental health delivery system
produces a functional paradox insofar as other major objectives of the
community mental health orientation are concerned. Since this struc-
tural configuration is highly conducive to competitive and conflictive
relationships between its various components, then it often falls short
of the goal of providing comprehensive continuity of care.

Incorporation of Existing Mental Health Programs and Groups

The passage of the bill creating the 648 Boards was the formal
beginning of community programs throughout the state of Ohio. However,
prior to this legislation, as noted earlier, some communities already
had organized public or private mental health programs which had existed
for several years. For the most part, these services which predated the
648 Boards fell into two general categories: outpatient clinics, or in
some cases, full-fledged federally funded community mental health centers.
Due to the important role that the outpatient clinic still assumes in
many community mental health programs, it is important to briefly indi-
cate some of the general characteristics of these clinics.

The concept of the outpatient clinic is also relatively recent,
dating back only to the 1950's. Although the outpatient clinic was
originally envisioned as an alternative to incarceration, in Ohio these
clinics were nevertheless viewed and operated as extensions of the state
hospitals. They were typically under the direction of a psychiatrist
(or a doctoral level psychologist if no psychiatrist was available), and
they operated, more or less, within the traditional medical model. Staffed
mainly by professionals, such as psychiatric social workers, psycho-
logists, and psychiatrists, but few if any paraprofessionals, the pri-
mary treatment in these clinics consisted of one-to-one counseling or
psychotherapy in combination with chemotherapy. In fact, it is only
within the last 5 to 10 years that any but the most progressive of
these clinics have begun to experiment with group techniques. However,
with the passage of the Community Mental Health Act of 1963, many out-
patient clinics across the country attempted to expand their programs
to provide the "five essential community mental health services" neces-
sary to be considered a comprehensive community mental health center.
But these efforts at self-reorganization rarely resulted in innovation;
and even when new services were instituted, emphasis usually continued to be placed on long-term individual therapy.

Nevertheless, when the community-based 648 programs were developed, the state advised that these outpatient clinics, along with other existing mental health agencies and groups, be incorporated as elements in the new local community mental health service systems. Usually this was done by a 648 Board giving a contract, for example, to a Guidance Clinic to continue all or some part of its previous program. However, this incorporation did not always run smoothly. In regard to this, one psychologist interviewed by the field team noted:

There are many localities in which agencies have existed for very long times, as a long tradition. They depended on the state to some extent for funding, but that was only a financial kind of bond or control that they had. The state never said anything about programs or any of that jazz. So, they were essentially operating in a very old kind of fashion. Now all of a sudden, the 648 Board is created and is given responsibility for running this whole show. And all of a sudden these agencies that were nice independent groups in the past have someone on the local level that they have to answer to not only for funding, but for some degree, program development. If you want a new program approved it has to go through the 648 Board to get their stamp of approval. Now the state (in the past) didn't really interfere too much as far as programming is concerned.

Thus, their pre-648 Board existence, the traditional ways they had developed of doing things, and the degree of local social and political influence acquired, all made incorporation of these pre-existing outpatient clinics into the larger community mental health delivery system often difficult. In the case of the federally funded community mental health centers, even as new as they were, some of the same problems emerged. But, in addition, there were other more formidable issues, particularly the high degree of autonomy the community mental health centers were still able to exercise even after the 648 Boards were established because of their federal source of funding.

By and large, outpatient clinics and the handful of federally funded mental health centers were the two major types of agencies most often subject to an attempt at incorporation into the newly developed community-based 648 systems. For these agencies, the emergence of the 648 Boards meant an eventual, if not immediate, loss of authority in several areas of decision making, which included not only funding, planning and coordination, but also the discretion to designate just what services the agency would perform without the collaboration and approval of the 648 Board. Especially in the case of the outpatient clinics, the
loss of autonomy had serious implications since there was an explicit ideological discrepancy between the medically oriented mental health conceptions of these clinics and the conceptions of mental health involved in the community mental health approach. Nonetheless, little by little, many old agencies and programs were eventually taken over by 648 Boards.

Thus, by 1974, there were roughly two kinds of general patterns observable around the state of Ohio insofar as mental health delivery systems are concerned (ignoring for the moment variations within each pattern). On the one hand, there was the pattern typical of many smaller and more rural counties or combinations of counties, and probably the type most prevalent in the state. This is a situation where the 648 Board has linked almost all of the organized mental health related agencies and programs to itself, so that its overall activities do constitute for the most part the organized mental health delivery system in that county. As Kielser (1965) points out, this pattern is not unique to Ohio but is typical of rural areas around the country.

On the other hand, a somewhat different pattern can be found elsewhere, especially in the larger urban counties of Ohio. A 648 Board exists in these areas, but there are also mental health organizations effectively outside of its control and coordination. In fact, as Zusman (1969) has suggested, in some instances these other groups are organized into service delivery networks that by and large constitute separate, different, and completely independent systems of mental health care in and of themselves. Of course, the extent to which the various private, university-based, and other mental health organizations outside the 648 framework actually constitute interrelated service systems is, an empirical matter. But one thing can be stated with a relative degree of certainty. In large urban areas in Ohio the delivery system organized around the 648 Board provides only some of the organized mental health services in the community, with many of the mental health related programs functioning completely independent of the 648 framework.

Thus, to recapitulate, there are essentially two generic patterns of mental health service delivery in the state of Ohio, and the roots of both can be traced to the institutionalization of the community mental health ideology, first at the federal level, and then at the state and local levels. As was pointed out earlier, this ideological approach to mental health care not only specifies the domain relevant activities to be carried out by the components of community-based mental health service networks, but, in addition, it generally implies the nature of the boundaries of community mental health service networks. By tracing this larger socio-cultural context surrounding the development of this approach to mental health care, it will therefore be possible to better understand why and how a certain kind of mental health delivery system came into being in Xenia. It will be demonstrated that in many ways the characteristics exhibited by this system were not that unique, either as compared to others in the state of Ohio or elsewhere in the United States.
This is another way of saying that if the tornado had occurred in a rural area elsewhere, the response of the mental health sector might have been much the same as occurred in Xenia. But in order to fully understand all of the pre-impact factors within which the established mental health system responded to the Xenia disaster, it is necessary to depict the characteristics of the established mental health system which existed at the time of the tornado.

The Characteristics of the Established Mental Health Delivery System

The first section of this chapter has examined the larger and more general socio-evolutionary context or framework influencing the type of mental health delivery system which evolved in Xenia. This section of the chapter will discuss the characteristics of that system, thereby completing the analysis of the Time One sociocultural factors within which the established mental health system in Xenia responded to the disaster. Our discussion will include 1) a description of the components, domain, and boundaries of the Time One formal mental health delivery system; 2) an examination of the major changes occurring in that system just prior to the tornado; and 3) a summary and analysis of the characteristics of the established mental health delivery system and its relationship to other organizations and groups in its external environment.

The Formal Mental Health Delivery System

In order to understand why a particular kind of emergent mental health delivery system came into being after the Xenia disaster, it is necessary to have knowledge of how the established mental health delivery system functioned in Time One. The set of characteristics this system had acquired were the result not only of the previously noted larger sociocultural factors facing almost any mental health delivery system in the United States in the past decade, but they were also the outcome of the particular demand-capability ratio the system had evolved in Time One. But as a result of the disaster, changes were produced in the demand-capability ratio of the established mental health system, thus leading eventually to the development of a new or emergency mental health system. To understand this change in the demand-capability ratio requires knowledge of the prior demands on the system and the set of characteristics or capabilities it had evolved to meet those demands.

Almost by definition, disasters create demands which need to be met. It is, however, easy to overestimate the demands in a community
hit by a disaster, and to underestimate the surviving resource capabilities (Quarantelli and Dynes, 1971: 18-19). Nevertheless, even when a system fully mobilizes its resources, it may not be able to meet the accelerated demands. Furthermore, there may also be significant changes in the kinds or quality of demands made upon the system following a disaster (Haas and Drabek, 1973: 252). Without knowing what kind of system had developed in the Xenia area and the pre-impact demands which led to that development, it would be difficult to understand the ways in which the additional and/or new demands created by the disaster affected that system.

Similarly, disasters not only affect demands, but they may also generate new and/or different capabilities in a system. In some instances, existing organizations or systems may assume entirely new tasks or responsibilities, thus changing their original character (Brouillette and Quarantelli, 1971). In other cases, new capabilities are manifested by new social entities, emergent groups which had no Time One existence (Fortz, Rayrer, and Zuskin, 1958; Quarantelli, 1966; Parr, 1970; Taylor, Zurcher and Key, 1970). Both neither the existing, but structurally changed, agencies delivering services different from their traditional ones, nor the newly created groups providing new services, come out of a social void or vacuum. Rather, there is a great deal of continuity between Time Two patterns and those of Time One (Forrest, 1972, 1974). Therefore, in order to understand the changes or shifts between Time One and Time Two, it is necessary to describe the pre-impact or Time One characteristics of the mental health system which were the larger background out of which the emergent system developed. More specifically, what were the components, domain, and boundaries of the established mental health delivery system in Xenia prior to the tornado?

System Components

To speak of a system is to suggest a set of units or elements that are actively interrelated and that operate, in some sense, as a bounded unit. Given this definition of a system, the agencies and groups which made up the formal cluster around the 648 Board, for the most part, constituted the components or units of the established community mental health delivery system in Time One. To understand the nature of these components and why and how they came to be linked in the 648 service network, it is instructive to trace the historical development of the Greene County mental health delivery system.

As indicated earlier in this chapter because of actions at the federal and state levels in the last decade, the stage was set for the development of local community mental health programs in Ohio. Prior to the passage of the 648 Act in 1967, Greene County had only two
organizations which had any kind of formal mental health programs, the Greene County Guidance Center and the Greene County Mental Health Association. But, once the 648 legislation was enacted by the Ohio legislature, the state charged local communities with developing and submitting comprehensive community mental health plans. Included was also the task of setting up the mandatory Community Mental Health and Retardation (648) Boards. The first 648 Board embracing Greene and Clinton Counties was appointed in 1968.11

Then, in 1969, the first community mental health plan for Greene County was submitted for state approval and funding. Under this initial plan, the 648 Board had only one contract agency, the Guidance Center. While the law made the operation of an outpatient diagnostic and treatment service such as the Guidance Center mandatory, it also required that the Board eventually administer at least one other service facility in order to receive state operating funds. However, for the time being, the decision was made instead to expand the services of the Guidance Center. In order to extend service to Clinton County, the Guidance Center set up a satellite out-patient clinic in that area. Thus, in the short-run, this one pre-existing agency was to remain the sole provider of mental health services; however, the long-run plan was to begin implementing the full gamut of community mental health services in the two-county area.

Faced with the broad responsibilities and regulatory powers set forth by the law, the 648 Board selected an executive director in 1970. At that time, other than being a conduit for state funds, the newly formed 648 Board was viewed primarily as a public relations agency by most sectors of the community. However, it had been delegated the more extensive responsibilities of planning, funding, administering, coordinating, and evaluating community mental health programs.

Once the executive director was appointed, the Board began to actively assume its planning function. Gradually additional services were organized, either through incorporating existing service agencies or establishing new ones. Prior to the passage of the mental health levy in 1973, decision making regarding service priorities was, for the most part, influenced by three major sets of factors. The first of these was the particular concerns of special interest groups involving either a particular problem area, such as drug abuse, or a particular target population, such as the aged. Secondly, certain sectors of the community consistently expressed dissatisfaction with the services provided by the Guidance Center. While the agency had promised new services and expanded treatment strategies, they were only provided on a limited basis, and when actually delivered were not done well. Furthermore, the agency almost always had at least a six-month waiting period for the acceptance of new clients. Finally, the availability of local funding necessary to acquire state matching funds was limited and unpredictable since the county had no mental health levy. Therefore, as a result of these factors, the type of planning which occurred at first tended to
be more sectorial than it was comprehensive, resulting eventually in a service network which promoted the interests of specific target populations or service agencies, rather than one which conformed to the overall objective of providing comprehensive community mental health services. However, as will be discussed later, once the mental health levy was passed, this orientation to planning changed.

But, in the meantime, during the six years prior to this, the pace of planning for a community mental health delivery system in the Xenia area was influenced sometimes by the pressures of community interest groups, other times by the self-interests of agencies seeking to receive funds, and always by a lack of funding. Therefore, different groups became part of the system on a staggered basis. Comprehensive planning was, by no means, a reality. Instead, capabilities were added to the system as demands increased or changed, resulting ultimately in a service network comprised of nine components together operating in a relatively narrow domain. Each of these components and their domains will be discussed separately.

The Guidance Center. The first contract agency, the Guidance Center, had been established as a private non-profit outpatient clinic around 1960, its major source of funding being from the state and the United Fund. Like most other outpatient clinics across the country at the time, it was staffed mainly by professionals, such as psychiatrists, psychiatric social workers, psychologists, etc.; directed by a psychiatrist, or doctoral level psychologist; operated, more or less, within the medical model; and emphasized a combination of individual psychotherapy and chemotherapy as its major form of treatment. However, after its incorporation into the service network, the agency consistently attempted to shift its philosophy and to diversify its services in response to community demands. For example, it altered its capabilities so as to give more emphasis to short-term and group therapy than in the past, at the same time abandoning lengthy diagnostic procedures. Indirect services, such as prevention and consultation were other capabilities increasingly demanded from the agency by various institutional sectors of the community, such as the schools, the courts, and the medical community. However, the Guidance Center was, for the most part, unable to provide this added capability given the existing structure and functioning of the agency. This sometimes led to sharp criticism and clashes with other sectors of the community. In addition, requests made for consultation over a particular client by representatives from the schools and the courts, by physicians, and others were often viewed by the Guidance Center as being in direct conflict with their own ethical standards, and understandably so, in light of the agency's traditional emphasis. Since it operated under professional and ethical standards associated with the medical model of service delivery, it held to the principle of the confidentiality of client records. But to these other groups and individuals, continuity of care depended on the Guidance
Center's willingness to assist them in working with a client, even if at times this amounted to no more than the Guidance Center's simply informing them as to whether or not the person had followed up a referral.

As indicated by the above problems, the agency's priority, despite the changing demands, continued to be the providing of direct services. As a matter of fact, they were the only organization in Greene County which had the capability to do so. Therefore, in order to expand these services to other localities, a second branch was opened on a limited basis in Greene County.

At the time of the tornado, the personnel of the Greene County branch consisted of the executive director who was a clinical psychologist who also carried a clinical caseload, a part-time consulting psychiatrist, four social workers, one part-time mental health technician employed also by another system component, the Day Treatment Center, and three clerical and administrative staff. The average monthly caseload of the agency and its branches during the six months prior to the tornado was reported to be about 450 clients, with an average of about 15 new admissions each month. However, this monthly caseload figure overstates the quantity and quality of service delivery, because not all cases were active ones; and the type of service rendered to each client ranged from a telephone referral to group or individual therapy. Typical of outpatient clinics offering these types of services, the Guidance Center consistently had at least a six months waiting list for new clients.

Yellow Springs Encounter, Inc. The second contract agency to receive funds through the 648 Board was Yellow Springs Encounter, Inc. This agency was originally organized and financed by a group of local citizens concerned over drug abuse in their community. Then in 1971 funding was sought and received from the 648 Board. While the program started out solely as a treatment modality for drug users based on the nonresidential therapeutic community service concept of New York Encounter, it gradually broadened its focus to include alcoholic rehabilitation services. To provide these services other clinical treatment strategies were gradually incorporated, such as individual counseling and group therapy. Although the agency was experimenting with providing a few limited indirect services in the months just prior to the disaster, well over 90 percent of its program was devoted to providing direct services. At the time of the tornado Encounter had four staff members, all of whom carried clinical caseloads. In general, most of these staff members did not hold graduate degrees in mental health related fields, since prior participation and success in the therapeutic community was a more important criterion for holding these positions than was professional mental health training per se.
Since its inception, Encounter's caseload has increased consistently, primarily as a result of the expansion of services and treatment strategies. The average monthly client enrollment in 1974, the year of the tornado, was 63. Although agency record keeping was practically nonexistent with the exception of basic intake and termination information, the general impressions of the staff were that the average age of the agency's clients was around 25, with 40 percent being male, and that the majority of these clients are referred to the agency by other clients.

The Crisis Center. The third agency to become a component of the 648 service system was also a drug agency. Consistent with the growing community interest and demand for drug-related services, in 1970 the 648 Board stimulated the organization of a drug council composed of concerned citizens and agency representatives. After considerable debate, the recommendations of this group led to the formation of the Crisis Center in Xenia. At first this agency was conceived solely as a hotline drug treatment program. Later due in part to the variety of services demanded from their clients, and in part as a result of the staff's basic orientation to drug treatment, the telephone crisis intervention and referral service was generalized to almost any conceivable type of personal problem. The majority of the calls received by the agency can be categorized as being general information, personal problems, legal problems, pregnancy and other sex-related matters, family problems, and of course, drug-related problems. In addition, the agency operated a separate back-up line for the Guidance Center during hours when that agency was closed. Even though the majority of the agency's services consisted of the telephone crisis intervention, at times the fulltime staff did offer limited crisis intervention services to walk-in clients, as well as some indirect services, primarily consultation, to officials from local schools, law enforcement agencies, and social service organizations.

Just prior to the tornado, the program had two fulltime staff members and a corps of about 25 unpaid volunteer paraprofessionals. The average monthly caseload of the Crisis Center varied seasonally between 350-600 calls, with the ratio of female to male callers over 2:1. However, sheer caseload data of this type does not accurately reflect the myriad of intervention strategies sometimes employed by the agency. Such unrestrictedness is facilitated both by the informal and flexible structure of the Crisis Center and by a basic human service orientation to service delivery.

United Health Foundation Drug Education Program. The fourth component, the United Health Foundation Drug Education Program (UHF), first developed and supported financially by the United Fund, was in 1972 allocated
appropriations from the 648 Board for the provision of indirect services; i.e., consultation and education in relation to problems associated with drug use. These services were provided mainly through consultation, training sessions, and other programs offered to the public, the police, schools, churches, social service agencies, and other community groups. The primary thrust of these activities was to educate various sectors of the community about drugs, drug abuse, and the resources available for preventing and treating problems connected with the use of drugs. At the time of the tornado, the agency's staff consisted of two persons, the executive director and a clerical person.

Since the UHF program was housed in the same facility as the Crisis Center, the two agencies exhibited a high degree of cooperation and sharing of personnel, information, resources and other capabilities in carrying out their activities. In effect, the two operated, for the most part, as if they were virtually one organization.

Yellow Springs Senior Citizens. The fifth agency to become a component of the 648 service system was the Yellow Springs Senior Citizens, an outgrowth of an earlier Commission on Aging. This group, which became a 648 contract agency in 1973, was envisioned primarily as a preventive mental health program for the aged. Operating with a basic human services approach, the agency provided a wide spectrum of services to the elderly in Yellow Springs, such as transportation, recreational programs, community service projects, referral services, and limited counseling. Furthermore, in the year just prior to the tornado, the agency had gradually begun to expand its services to include other communities in the two-county area through a home and institutional visitation and outreach program.

Prior to the tornado, there were four staff members employed at Senior Citizens: the executive director, a secretary, a community service worker, and an outreach caseworker. The average monthly caseload was approximately 120 clients. But such figures do not fully capture the quantity or quality of services rendered, since activities like visiting nursing homes, sponsoring parties, providing transportation, etc., are not easily quantified in this way.

The State Hospital Aftercare Program. The sixth service to be included in the community mental health service system was an aftercare program for patients released from state mental institutions. Much like the Crisis Center this program was conceived by another citizens' planning committee organized by the 648 Board and was established in 1973. The purpose of the project was to provide coordinated continuity of care to ex-hospital patients in order to facilitate their re-entry into the community. Three 648 funded agencies delivered the aftercare services: nurses from the County Health Department conducted home visits to clients,
administering injections and evaluating their progress; the Guidance Center offered psychotherapy, psychiatric supervision, and consultation to the nurses; and a case manager, known as the alternate care coordinator, was employed as a 648 staff member to coordinate all aspects of the project with the State Hospital, including making referrals for any additional services necessary to the patient's readjustment. It should be noted that this latter facet of the program was a source of considerable conflict and sharp disputes between the 648 Board and the two other components engaged in this program. While the factors responsible for this were varied, there was one primary and built-in source of contention. This was that the 648 Board was engaging in direct service delivery through its own staff, i.e., the alternate care coordinator. In effect, the appropriateness of this arrangement was questioned on the grounds that the administrative (648) agency was assuming responsibilities which ought to be carried out by a contracting service agency.

In spite of the above difficulties, the average caseload of this program was approximately 20-30 clients, which involved around 250 home visits by the public health nurse. For the home visitation component of the aftercare program the County Health Department received funding for one nurse through the 648 Board, thereby making them the sixth contract agency.

Emergency Psychiatric Services. Another service recommended both by the federal community mental health legislation and the state was that of short-term inpatient and emergency care. To provide this, Greene Memorial Hospital became the seventh contract agency during fiscal year 1974. Essentially, this service had three facets: the provision of limited psychiatric evaluation for patients admitted to the hospital emergency room; short-term limited inpatient psychiatric care; and follow-up treatment services supervised by the 648 alternate care coordinator. While the service was originally envisioned as serving about 15 persons a month, the caseload consistently fell below this figure. As a matter of fact, the caseload was so low that no systematic data was kept.

The Day Treatment Program. Consistent with a growing interest in alternate care both at the state and local levels, the 648 Board established a Day Treatment Program under the supervision of the Guidance Center in 1974. This service was intended to serve individuals requiring more than limited outpatient care but not in need of full hospitalization. The treatment strategies employed by the program were varied. They included group psychotherapy, psychodrama, craft activities, discussion groups, self-help skills, and recreational activities. At the time of the tornado, the staff consisted of one full-time mental health technician and one part-time activities therapist. However, the supervision and
major treatment components of the program such as psychotherapy, chemotherapy, etc., were provided by the Guidance Center. Operating only three days a week, the facility on the average served about 10-15 clients per day.

In summary, prior to the tornado, the Greene County community mental health system had nine service delivering components: one outpatient clinic and its two branches, three drug-related services, one program for the aged, an emergency inpatient psychiatric service, two aftercare services, plus a mental health service for families of mentally retarded persons. There was, of course, one other component of the system, the 648 Board, which had responsibility for planning, coordinating, funding and evaluating the different service components. These functions were primarily carried out for the board by its staff.

The 648 Board and Staff. Prior to the tornado, the board consisted of 15 members each serving four-year terms. As specified by law, one-third of the members were appointed by the State Commissioner of the Division of Mental Health in the Ohio Department of Mental Health and Retardation. Of the remaining ten, three were named by Clinton County commissioners, and seven were Greene County appointees. There were six physicians on the board, including one psychiatrist and one pediatrician. Three of the board members were, or had formerly been, school teachers, while two other members were currently professors of psychology at nearby colleges. In addition, one of the representatives was a minister and one, the designee of the probate judge, was a lawyer.

Although not all board members were professional people -- one member was a farmer, another a housewife -- almost all exhibited a strong interest and involvement in the area of mental health care. For instance, most were associated with local mental health associations and several of those in occupations not specifically related to mental health, nevertheless, had significant training in that area. Compared to many other 648 Boards throughout the state, the members of the Greene County group appeared to have more background training and experience for their positions than is typically the case.

The officers of the 648 Board consisted of a chairman, vice chairman, treasurer and secretary, who together made up the Executive Committee. The board also had Budget, Program, and Policy Committees, each of which met separately, reviewing the activities of the contract agencies and periodically presenting reports at the monthly public 648 Board meetings.

Although the 648 Board was instituted in January, 1968, the staff of the 648 was not formed until 1970. That year besides an executive director, one clerical person was also added to the staff. No further persons were hired until 1972 when a program coordinator was added. In
1973, prior to the passage of the mental health levy, an account clerk, a community relations coordinator and training officer, and an after-care coordinator were also added to the staff. And, just prior to the tornado, a budget director was brought on, and shortly thereafter another clerical person, thus making a total of eight staff members. The 648 staff, therefore, exhibited a consistent increase in size from its inception on, a fact which reflected its increasing involvement in administering the service network.

Having thus described the various individual components which together made up the established mental health delivery system in Greene County and briefly discussing the domain of each, what then can be said about the overall domain or sphere of operation of the established or Time One mental health delivery system?

System Domain

The domain of a system refers to its specific objectives or goals and the tasks or activities undertaken to fulfill these objectives (Levine and White, 1961; Dynes, Quarantelli and Kreps, 1972). In other words, the domain of a mental health delivery system can be thought of more specifically as the goals and ideologies of treatment to which it is committed, the services offered, and the population or types of client problems served. According to the guidelines established by the state, the 648-based service networks are supposed to operate in a domain which reflects the objectives and goals of the community mental health concept of service delivery. Therefore, the kinds of services to be offered and the types of client problems or populations to be served follow from this basic overall approach to mental health care. However, by no means are the services provided by all the 648 service systems across the state this comprehensive, nor do they all necessarily put the beliefs and objectives of the community mental health ideology into practice. In many respects, the Greene County mental health system, even in Time One, was both more comprehensive and more progressive than other 648 systems in similar types of small rural communities around the state. Nevertheless, by examining the domain of this system, it will be evident that in Time One, the Greene County mental health delivery system, like many others, by and large did not reflect the objectives of community mental health service delivery.

Generally speaking, in Time One the system operated in a relatively narrow domain. Of the ten essential services required of federally funded community mental health centers, the Greene County system offered only five, and some of these were provided on a very limited basis. These included inpatient care through the Greene County wing of the nearby Dayton Community Mental Health Center, formerly a state hospital.
facility; outpatient care through the Guidance Center and to some extent Encounter; partial hospitalization through Greene Memorial Hospital; diagnostic services through the Guidance Center; and limited aftercare services through the Day Treatment Center and the problem-ridden state hospital aftercare program. However, emergency mental health services as defined by NIMH and state guidelines were clearly absent, as were for the most part rehabilitation, training, research and evaluation, and indirect services (except in connection with mainly drug-related problems). Furthermore, of those services which were offered by the system, the highest priority was given to those with a traditional orientation to service delivery. This is reflected by the fact that over 70 percent of the system's total financial resources were committed to the delivery of direct clinical services by the Guidance Center and Encounter,16 with the remaining funds used to support programs geared toward special problem areas, such as drug use, or special target populations, such as the aged and patients released from state mental institutions. Thus, in general, the system not only failed to offer the full spectrum of comprehensive mental health services, but the services it did offer were relatively specialized. Together these two factors suggest that the system's target population was, in fact, a rather small and well-defined segment of the community, rather than the total community as such.

By comparing the domain of the Greene County mental health system in Time One with the domain relevant characteristics of the community mental health ideology, the contrast is evident. In general, the major emphasis of the Greene County system was on the treatment of existing disorders, rather than on the prevention of disorders; on providing service mainly in clinical settings, rather than out in the community; on the delivery of direct clinical services, rather than indirect services; on providing services to a well-defined narrow population, rather than to the total community; and on identifying and treating the sources of disturbed behavior inside the individual, rather than locating and altering the stress-inducing aspects of the larger social environment. In short, the Time One system was operating within a more traditional medical model of service delivery, and therefore in a domain considerably different and more narrow than the expansive domain to which the community mental health ideology stakes its claim.

However, the concept of domain not only provides an image of what a system will do, but it also serves as a guide to what it will not do. Or, stated differently, the domain of a system serves to clarify its parameters or boundaries in relation to other systems by answering the following questions: what is appropriate for the system to do; what must be done; what may be done; what should be done; and what should not be done? (Haas and Drabek, 1973: 178) The next section is devoted to a discussion of the particular nature of the boundaries established by the Time One system operating within its given domain.
System Boundaries

In order to exist as a distinct systemic entity or whole, a system must maintain some discontinuity with its environment. Applying the concept of boundaries therefore implies a degree of separation between the system and its environment, that is, that part of the physical and social world outside its boundaries. However, the boundaries of social systems obviously are not clearcut demarcation lines, but they exist more or less as dynamic "lines" in social space representing discontinuities in patterns, and clusterings of activities and interaction. In other words, boundaries are the demarcation lines or regions separating appropriate system activities from inappropriate activities. They also constitute barriers for many types of interaction between organizations and groups on the inside and those on the outside (Katz and Kahn, 1966: 61). Therefore, there is both a greater connectedness in activities and more frequent interaction between the component organizations within the boundaries of a system than there is between these components and other groups and organizations outside the boundaries of the system.

Of course, any open system takes inputs across its boundaries, converting these materials within its boundaries, and then exporting the products of its conversion across its boundaries. But even among open social systems boundaries vary in the degree to which they are permeable. While all open systems must engage in exchanges with their environments, therefore manifesting a degree of interdependence with elements outside their boundaries, some system boundaries are easily penetrated while others tend to maintain stricter boundary controls. This applies to personnel, clients, information, ideology and other resources brought in and sent out of the system.

Following from the above discussion, the boundaries of the Greene County mental health system in Time One can be established through examining the types of activities and interaction engaged in by the system and the ways and degree to which these were separated from the activities of other organizations and systems in its environment. In philosophy and in practice the types of activities engaged in by the system reflected a traditional orientation to mental health care. For the most part diagnosis and treatment constituted the core activity of the system, and these were carried out in limited settings, primarily inpatient or outpatient settings, and through limited techniques, the main one being some form of psychotherapy. Of course, the system did have a few new components which offered other more non-medically based treatment settings and modalities, but together these components actually provided a very small part of the system's overall capability. Even these, however, offered relatively specialized services to rather well-defined groups or target populations. What this meant was that the system therefore had relatively clearcut and limited criteria for
establishing the types of disturbances or client problems which ought to be treated within its own boundaries, rather than by other community care-giving systems. These client problems included, for example, those persons falling within the diagnostic categories employed by the Guidance Center, drug users, ex-hospital patients, and so on. Even more importantly, the specialized nature of the technologies required to treat most of these categories of problems required that those providing the treatment be trained in the traditional mental health professions. Apart from those professionals working in the Greene County 648 network, few such others existed in the area, either in private practice or otherwise.

By restricting its domain in the above ways, the activities of the Greene County mental health system in Time One were, therefore, rather sharply delineated from those of other care-giving groups and organizations in the community, such as those, for example, in the social service, the medical care, welfare, and religious sectors. Or, put differently, there was very little overlap in the services and activities engaged in by the mental health system and those of other community care-giving organizations in the community.

However, as noted earlier in the chapter, the community mental health ideology emphasizes the importance of boundary permeability and interpenetration, that is, a high degree of interaction and interdependence among the activities not only of the components within the mental health system, but among all care-giving organizations in a community. In fact, this is an absolute necessity for providing continuity of care. Recognizing this, the new system components actually established by the 648 Board did reflect a move toward the delivery of more indirect services and more frequent interaction with other community organizations and groups. But the services provided by these newer system components were nevertheless specialized in their focus, limited in the scope of their operation, and sometimes poorly structured and designed. In short, the Guidance Center still remained the central referral point for the entire service system, and, therefore, the core agency of the 648 system.

Not surprisingly, at the time the tornado occurred the entire system was undergoing sweeping changes, materially assisted by the recent passage of a mental health levy. These changes were intended to have significant consequences for the components, domain, and boundaries of the system. Due to the fact that the tornado generated demands for services consistent with some of the innovations under consideration, but not as yet implemented, it is necessary to examine the major shifts which were developing literally on the eve of the disaster. Furthermore, this discussion will point out why in some cases the system was initially reluctant to respond to the pressures of outside groups after the tornado, since many of the ideas they proposed conflicted with the system's newly emerging orientation.
Trends in the Delivery of Community Mental Health Services

Two major trends were underway at the time of the tornado. First, there was an ongoing move toward planning and implementing a genuinely comprehensive and better integrated mental health care system, one that would include the full spectrum of community mental health services. This meant expanding the domain of the system considerably through establishing new service delivering components and altering the characteristics of some existing ones. However, what this also meant was that the 648 mental health system was seeking to establish services which fell under the domains already claimed by other existing organizations and groups in the community. In other words, the boundaries of the mental health system were becoming more blurred in relation to other systems. A second trend, therefore, was produced by this move on the part of the 648 Board to extend the boundaries of the formal mental health delivery system. Groups and personnel providing mental health related services around Xenia, but not part of the formal mental health service system, were losing some of their saliency. In short, what was happening was that the 648 Board service system was attempting to "capture the field" by becoming the hub around which all the mental health related service provided in Xenia revolved.

The Trend Toward Comprehensiveness

With the enactment of a 2 mill levy, the highest for mental health in the state, the 648 Board instigated full-scale planning efforts with the objective of instituting the entire gamut of comprehensive mental health services in the area. To accomplish this, a planning committee was established by the Board which included participants from the Mental Health Association and other local citizens. However, due to a technical error on the petition, the community did not receive the local tax money in 1974. But this untimely error did give the committee an additional year to plan the kind of delivery system which it felt was most suitable for the two counties involved, Greene and Clinton. In order to proceed toward this, planning committee members met with various local organizations and all of the contract agencies to consider proposals and ideas. One group proposed a single Human Resources Agency; another suggested one or possibly two mental health centers.

Finally, after considerable research, the committee recommended a more decentralized but interdependent network of specialized mental health services, rejecting the concept of the single mental health center. A variety of factors accounted for this decision. For one, the geographic area involved had no major central city, but was instead comprised of numerous relatively small rural communities, differing in
their social composition and having separate governmental structures. To establish multiple mental health centers which would encompass all of the needed services would have been both costly and unnecessarily duplicative, and therefore difficult to justify to taxpayers. Similarly, the decision makers felt that to locate only one such center in a given locality would have reduced the probability of adequate services being provided outside of that community. Secondly, it was believed that a single facility would not meet the specialized needs and anticipated demands for services that existed in the two counties involved. The area included a fairly large number of Blacks, elderly and poor. It was thought that a decentralized service network would more effectively reach these target groups. Finally, because a number of contract agencies already existed which could provide certain elements of the comprehensive programs, it would not only have been wasteful but also deleterious to interagency cooperation to establish a single new facility to provide by itself the full spectrum of required services.

Eventually the projected kind of delivery system chosen was structured the same as the existing system, except that there were to be enough contract agencies or components to provide the full range of comprehensive mental health services recommended by the state. The interdependence of these services would be contingent upon the development of coordinating mechanisms by the 648 Board, such as standardized policies among the contract agencies, the case management philosophy, etc. Yet, in this type of system the various agencies, which retain their own autonomous boards, would still be given some degree of discretion over their own operations, as long as they provided the basic services contracted for by the 648 Board. But it was the function of the 648 Board to facilitate nonduplicative and noncompetitive system interdependence through overall planning and coordination.

However, despite the apparent similarity between the existing and the proposed new system, there were two major changes in emphases which were both significant and controversial. First of all, the entire mental health delivery system was moving increasingly away from the treatment focus of the medical practice model and toward that of the community mental health based human services model of health and disturbance. This not only represented a major extension of the system's domain but in some respects also involved the establishing of a new domain. While some of the existing specialized and more clinical treatment modalities were to be retained, the bulk of the new services were to be community-oriented. A comment made by a 648 staff member well illustrates the changing orientation.

My thesis about mental health is that it has to be a sort of preventive thing. It's going to have to work with groups who have problems, rather than waiting in an office with a long white robe on. I think there was an indication at a board meeting even before the tornado that the board should get into the area of
social action. I think a mental health board has to point out community inadequacies. I guess it would be called social engineering. Our board is changing and it's now not heavily dominated by medical people anymore. So, in general, they tend to be more favorable toward the community approach. And the clinical approach to mental health, which we have long contended with, I guess you could say is "about as dead as last week's fish." Of course, you can always argue on the basis of expenditures too, if you can justify getting the most services for a dollar. And if you go for the clinical approach, well then you are going to spend an awful lot of money and see relatively few people. We could spend $300,000 at the Guidance Center and maybe not see 5000 people a year.

Secondly, in contrast to the sectorial planning that had occurred prior to the levy, the new approach to planning stressed the delivery of the full range of comprehensive mental health services; i.e., inpatient care, outpatient care, emergency services, partial hospitalization, consultation and education, diagnostic services, rehabilitation services, precare and aftercare services, training, and research and evaluation.

In other words, in the past the overall program tended to be organized around the components or agencies which already existed. However, the new comprehensive community mental health plan was organized around the provision of the essential services, rather than specific agencies. Nevertheless, there were, in fact, preexisting agencies. But, more importantly, the new plan called for a major restructuring of the prevailing activities of these agencies. In some cases, the plan required certain existing agencies to rather drastically alter their services, which meant in the case of the Guidance Center a major reduction of its domain of operation. Others which were providing essentially the same type of services, such as the three drug agencies, would be requested to merge under one administrative and supervisory board. Still other organizations would have to expand their services to different localities in the service area. And, finally, new agencies would be created which would, in some instances, assume some of the functions taken away from old groups.

Not surprisingly, this plan for the future and moves to implement it set the stage for a considerable amount of intraagency, interagency, and agency-648 Board conflict. Indeed, throughout its existence the 648 Board and the one agency which predated it, the Guidance Center, had been involved in frequent disputes and direct confrontation concerning the changing authority structure, with several of these battles appearing in the local newspapers. However, with the 648 Board beginning to assume its full-scale responsibilities, the stage was set for additional and broader conflicts within the system. Furthermore, since adequate
coordination through interagency referral and communication had been lacking in the past, the board, through its staff, began taking active measures to ensure greater interdependence among the service agencies. Policies and procedures for the agencies, such as staffing, budget requests, program changes, etc. were becoming increasingly more standardized and formalized in order to facilitate the exercise of authority necessary to carry out the board's responsibilities. In short, the autonomy of the different components in the system was being severely curtailed. But, at the same time, with the passage of the mental health levy, agencies were finding that alternative sources of funding were becoming scarce, a fact which prevented them from withdrawing from the 648 service system. The perspective from the viewpoint of the contract agencies is clearly indicated in the comments of a staff member of one such organization.

Under the new plan a lot of services will be centralized, and it is already starting early, services like purchasing, budget management, program development, physical facilities management, and the general administration of the agencies. Also, the 648 is wanting to equalize salary schedules across the contract agencies. Not only is the salary schedule going to be equalized, but personnel policies, practices and fringe benefits. I guess what this means is that by getting 100 per cent of our funding from 648, from now on they will have complete control over the affairs of the organization.

Thus, the entire community mental health delivery system was in a major state of transition just prior to the disaster. Since the levy money necessary to implement most aspects of the plan was not forthcoming until January, 1975, the new delivery system had not yet been instituted when the disaster occurred. The basic decision had, nevertheless, been made. However much the various service agencies objected, major changes in their activities were clearly in the offing. The tornado was to inject itself into this context, and these events were to subsequently have a significant effect on the way in which the system responded to the disaster.

The Incorporation of Peripheral Groups and Organizations

To understand the behavior of any open system requires knowledge of its relationship with the larger environment in which it functions. Hall and Fagen define the environment of a given system as "the set of all objects whose attributes are changed by the behavior of the system" (1956: 20). In actuality the environment of any system is comprised
of an infinite set of elements which lie outside the boundaries of the system. Therefore, to analyze the interaction between these environmental elements and any particular system, it is important first to define the relevant portion of the total setting with which the analysis is concerned. While the environmental subsectors of open systems have recently been conceptualized in varying ways by sociologists, in this chapter, our discussion will concern only one major segment of the environment. However in Chapter V, when the analysis turns to the conditions responsible for the collective response to the disaster, it will be necessary to systematically treat a much larger segment of the total setting in which the mental health system found itself.

The segment of the environment to be discussed will be referred to as peripheral groups and organizations. These are groups in the environment of the Greene County formal mental health delivery system which, although they are designed primarily around other goals, do nevertheless engage in the delivery of mental health services in the broader sense of the term. Dill (1958) has referred to those groups and organizations comprising this portion of a system's environments as competitors in that their domains overlap somewhat with the domain of the focal system. Therefore, these peripheral organizations are in competition with the focal system for personnel, information, clients, and other resources. As such, these groups and organizations have a significant effect on the demand-capability ratio and thus the behavior of the focal system, and vice versa.

In Greene County in Time One there did exist numerous such peripheral groups and organizations which functioned as mental health caregivers. More specifically, some of these were groups of people whose work was related to psychotherapy, such as physicians, ministers and marriage, educational, vocational and industrial counselors. Others were individuals and organizations whose work requires that they do psychotherapy a great deal of the time even though they do not claim the title of a mental health organization or therapist, such as the personnel in various social service, welfare, and other health-related organizations. Recognizing that these individuals and groups have a significant effect on the mental health of the community, the new comprehensive mental health plan intended to incorporate these resources within the total mental health program, and not merely as targets of consultation and education, but as basic components of mental health planning and services. In other words, since the new system to be developed was to be organized around a basic human services orientation to service delivery, the boundaries of the formal community mental health delivery system were to be extended so as to form a network of liaisons with all those local groups which participate in serving the mental health needs of the area. Indicative of just how far the 648 Board intended to go in carrying out this strategy were the remarks made by a psychologist from the Xenia area.

When they talk about mental health services, they talk more about community kinds of thing. Like
examples are given of, if they're building a housing project without a playground, it is the job of the mental health board to see that they put a playground in, because that is preventive mental health.

Ultimately it was hoped that this blurring and interpenetration of the boundaries of the mental health system and other care-giving systems would produce a structural pattern conducive to the providing of continuity of care. However, to some extent this strategy depended upon willing cooperation and collaboration among the various agencies involved, for the 648 Board actually had no formal authority over these other groups. But to facilitate the viability of this new approach, plans were underway to co-opt some of these peripheral groups by luring them into the service network through partial funding. However, at the time the tornado struck, these ideas were still in their formative stages, and it was evident that the creation of this new network of liaisons with peripheral organizations would, by no means, be an easy task.

A prime example of such peripheral individuals and groups is the clergy. In fact, it can be argued that some of the functions which the more formal mental health sector performs in modern societies, particularly those revolving around basic human needs, major turning points or crises in living, and the struggle with just how one should live, once were almost the exclusive prerogative of the church. To overlook the therapeutic function that religious institutions still provide in any community would therefore be to ignore a major source of mental health services for certain segments of the population. Recognizing this very fact, pastoral counseling was among the first paraprofessional training programs instituted by community mental health professionals around the country in an effort to disseminate mental health skills, such as psychotherapy, to the clergy. In Xenia in Time One, there were, however, only a few licensed pastoral counselors who offered counseling on a formal and systematic basis. But this is not to say that many of the rest of the clergy did not routinely and informally perform therapeutic (i.e., mental health) activities. These services may not have been organized, and by no means were they always given a formal label; but mental health services were, nevertheless, delivered by religious institutions in Xenia in Time One. This is perhaps illustrated by the observation of one local clergyman:

There is a model that the clergy have that most people in the mental health group do not have. Most of what we do is not formal, but people do come to my office. Most of my counseling is just brief, such as curbside conversations, couples having problems in their marriages, some kid going off to jail, these sorts of things. So I might have my counseling, say, in a courtroom or a hospital, or street, in my office, in someone's home, sitting in a local coffee shop drinking
coffee and someone sitting down beside me, or I'm standing on a street corner and someone walks up, or at a cocktail party. Most of it is very brief. Just a little conversation on the side here and there and all of a sudden they call on the phone and say, "Can I stop in and see you?" Then maybe the person will counsel with me regularly for two or three months, or it may just be one or two sessions.

In order to further support this method of service delivery, the 648 Board and staff hoped that when the new levy monies were available the 648 staff training officer could launch a full-scale pastoral counseling training program.

Similarly, in all communities, including this one, an indeterminate but substantial amount of mental health treatment remains in the hands of those physicians who continue to hold that mental disorder is a disease process no different in quality from any other disease. In sharp contrast to the techniques employed by the more formally designated mental health care-givers in the community, the therapy performed by these physicians often tends to be predominantly organic in nature although it is also typical for long-time family physicians to engage in informal counseling with their patients. But organic or not, effective or ineffective, such activities are part of the mental health services provided in any American community. It can be assumed this was also true in Xenia. In fact, a survey of a random sample of the Xenia population conducted only a few months after the tornado by DRC in conjunction with a Xenia area group revealed that a majority of the people are inclined to turn first to family physicians when they experience some type of emotional or mental health problem.¹⁹

However, by and large there were few formal or informal linkages between the medical sector and the 648 service system in Time One. The few relationships which did exist were largely conflicting in nature, particularly those with the Guidance Center. Recognizing these problems, a major priority of the 648 Board, once the new service system was implemented, was to organize mental health training sessions for physicians. Even more importantly, plans were being considered to actually locate psychologists or social workers in the three major medical office buildings around the community so as to provide both regular consultation and education services to physicians, as well as to make available a source of referral for direct clinical services.

Mention should also be made of private practitioners, such as psychiatrists, clinical psychologists, and other mental health professionals who offer mental health services apart from the more formally designated public mental health delivery system. However, as in most rural communities of comparable size, there were only a very few
such private practitioners in the Xenia area. Most of these were already linked to the formal 648 network either as consultants or part-time employees.

Looking more specifically at just what is meant by mental health services, a good deal of the client problems which concern the contemporary therapist operating in community-based programs are those which result from the stresses and strains inherent in daily living or, as they are typically called, "problems in living" (Szasz, 1960). In fact, one of the basic premises of the human services approach to mental health care is that just as people display many and varied types of problems, there is a need for equally numerous and diverse kinds of help, including everything from psychotherapy to a good friend to the material necessities of life. If this comprehensive view is taken of mental health services, then much of what goes on in many welfare and social service agencies can be thought of as having a community mental health function. In recognition of this, a major objective of the new community mental health plan in Greene County was not only to provide indirect services to these agencies and groups, but to fund directly a series of training programs geared toward educating the staff of these agencies about the use of mental health techniques and the range of services available through the 648 system. By so doing, the board hoped to increase the linkages between the formal mental health system and these other providers of human services.

The organizations falling into this category included agencies like the County Welfare Department, Easter Seals, the Community Action Council, Welfare Rights, Catholic Social Services and Planned Parenthood, to mention only a few. Furthermore, that some of the personnel in these organizations clearly defined a portion of their activities as involving the delivery of mental health services can be seen in the remarks of a "counselor" in one of the above mentioned agencies:

You normally think of mental health centers as getting the more disturbed situations. But in talking with the people on our own staff, I think we too see some disturbed cases, perhaps those that the mental health centers aren't seeing. I think the advantage that they have is they can prescribe medication where we can't. We have no psychiatrist or doctor on the staff who could do that, whereas they have the personnel who could. We could and do provide a number of times per week counseling sessions... That's what we're primarily set up to do. But we would prefer perhaps that they would go to an agency where they can get medication, if this is what the person needs.

Any listing of social service agencies should also include the Red Cross and the Salvation Army. These two voluntary associations not only perform therapeutic services like family counseling on a
regular basis, but in addition have formal mental health related func-
tions in disaster situations. For example, one of the major tasks of
the Salvation Army in disasters is the providing of "spiritual support
and counsel" (Ross, 1970); and the Red Cross, by Congressional charter,
is responsible for providing emergency food, clothing, shelter and
medical care at times of major disasters (Adams, 1970). Subcomponents
of both of these organizations operated in the Xenia area prior to the
tornado, although both offered only limited services.

Before leaving this discussion of peripheral groups, mention
should be made of another service which is frequently provided by for-
mally designated mental health organizations. This is treatment and
rehabilitation for alcoholics or problem drinkers. In some Ohio
counties, programs for alcoholics are explicitly incorporated into the
comprehensive 648 community mental health delivery systems. In Greene
County, however, treatment and rehabilitation for alcoholics was the
primary responsibility of the County Health Department. The services
provided by this agency included group and individual counseling (per-
formed in the office, the county jail, and the hospital), detoxifica-
tion, education and public information sessions, a walk-in alcoholism
center, and referral for rehabilitation to the appropriate welfare and
social service organization or to the local informal group of Alcoholics
Anonymous (AA) which met regularly in Xenia and Fairborn.

Various components of the formal 648 system traditionally made
referrals to the alcoholism unit of the health department. But, in
contrast to the above mentioned groups and agencies, the newly develop-
ing community plan did not specifically call for any changes in the
relationship of the formal mental health system to this agency. This
is perhaps because the 648 Board clearly did not want to assume any of
the funding responsibility for this program. On the other hand, the
County Health Department had different expectations from the board once
the levy monies were available. As a matter of fact, it is not insig-
nificant that later in Time Two the health department, indeed, did
approach the 648 Board for supplementary funds for this program.

This brief examination of the various "quasi" mental health or-
ganizations and groups which existed in Xenia in Time One, but outside
the boundaries of the formally designated community mental health sys-
tem, was undertaken to suggest a very important point in relation to
the system's disaster response. The mental health needs being met and
the resources used by these groups and organizations in the system's
environment did affect the Time One demand-capability ratio of the for-
mal mental health system. Whether recognized or not, these other cap-
abilities for providing mental health services were present prior to
the time of the tornado and thus existed as a latent reservoir of skills
and resources which could have been called on in times of sudden need,
such as a disaster situation. In fact, as was pointed out in the above
discussion, the 648 Board had begun to realize the significant contri-
bution these resources could make to the total mental health program in
Greene County. However, despite the overall plans for the future previously discussed at the time of the disaster no formal and few informal linkages and collaboration existed between these peripheral groups and organizations and the formal mental health system.

Nevertheless, despite all that has been said about the capabilities available through these more peripheral groups, as a result of the changes taking place in the formal community mental health system, these groups were probably losing some of their saliency in Time One before the tornado. The public discussions, even the open conflicts, about the new community mental health plan tended to define the activities of only certain groups and organizations as mental health services. Clearly, the salient groups were the formal cluster of components organized around the 648 Board. As pointed out a long time ago by Lazarsfeld and Merton (1948) the very fact of public attention, particularly if reported by mass media organizations, tends to legitimate whatever is being reported. In one sense, therefore, the conflicts concerning the new comprehensive mental health planning being developed by the 648 Board reinforced and made more salient in the community which groups and what activities were associated with the label mental health. Thus, it can be stated with relative certainty that in Time One the saliency of these peripheral groups and the mental health related services they offered was diminishing in the public eye. Or, stated differently, with the moves being made by the 648 Board to enlarge the domain and expand the boundaries of the formal mental health system, it seemed as if the 648 Board was attempting to make the new mental health system the hub around which all human services in the community revolved. To summarize, the following statement made by a staff member of a local social service organization reflects the way this was viewed by some of the above mentioned peripheral organizations and groups.

Now that they have the new mental health levy, it seems like the 648 Board is trying to become the most powerful group in town. And they probably can. A lot of us older agencies are just now beginning to feel the squeeze of funding cuts. But mental health is now having its heyday. I guess their time will come like ours did, and in the meantime maybe the community can benefit in some way from the big ideas 648 has for mental health in this community. But from what I hear of this new plan, there's bound to be some turf problems with the older agencies.
To conclude, it can be stated that out of the larger context of the ideology of the community mental health movement and the 648 legislation in Ohio, there had developed in Xenia a community mental health system operating within a particular structural configuration, that of an interorganizational system. In general, what, then, can be said about the characteristics of the established mental health delivery system which existed in Greene County prior to the tornado? First, despite the larger context, for the most part the components, domain, and boundaries of the established system in Xenia did not reflect the community approach to mental health care. Secondly, as a system, the 648 service network was a relatively loosely integrated one. While there was nominally strong control exercised over the system by the 648 Board, in actual fact, less authority was exercised because of the structural arrangements between the Board and the contract agencies. To be more specific, the semiautonomous status of the agencies created considerable potential for competition and conflict. But this conflict also stemmed from the fact that the system did not have a sharp division of labor. That is, its components simply did not have clearly established and separate domains, but there was, instead, some overlap and intermeshing of their activities and services. And, finally, certain peripheral groups outside the boundaries of the system duplicated some of the services which fell under the domain of the formally designated mental health system. Yet there were no formal linkages and very few informal ones, between the established mental health system and these peripheral elements.

Graphically, the delivery of mental health services in the Xenia area in Time One can be depicted as follows. The activities of the peripheral groups, indicated by the dotted lines, are shown to overlap somewhat with the domain of the established community mental health system.
Figure 2: The Established Mental Health System and its Peripheral Elements
However, in the months just prior to the disaster, the established system was undergoing major shifts as a result of perceived changes in the demands for services. The projected plan envisioned: 1) establishing several new components and altering some existing ones; 2) an expansion of the overall domain of the system to include the full range of comprehensive mental health services; and 3) an extension of the system's boundaries which would involve forming new relationships with peripheral groups in the system's environment. Furthermore, changes were to be instituted which would make the system a far better integrated one. For one, the autonomy of the service delivering system components was to be reduced, and at the same time the authority of the coordinating component, the 648 Board, would be increased. Secondly, a clearer division of labor between the service components was to be established.

What all this meant was that, even though the new comprehensive service network had not yet been established, the existing community mental health delivery system in Xenia was, at the time of the tornado, the most salient provider of mental health care in the community. As a matter of fact, when the tornado hit, these projected plans of the 648 Board were still on the drawing board, and even there they were the subject of considerable dispute and, at times, outright confrontation. Nevertheless, these trends in planning were to have a considerable effect on the response of the system to the disaster, both for the component which spearheaded the change, i.e., the 648 Board and staff, and for those components which were in opposition to these innovations.

How then did this system respond to the demands generated by the tornado? What mental health services did it attempt to provide, and what services were actually provided? The next chapter attempts to answer these questions, first, by examining the short-run collective response of the established system to the disaster; and, second, by describing the full emergence in the long-run Time Two period of a new or emergent mental health delivery system.
Footnotes

1. The concept of ideology has been employed in various ways in sociology (e.g., Mannheim, 1936; Aron, 1957). In the field of collective behavior ideology has been emphasized perhaps more than any other single factor in the explanations advanced for collective behavior phenomena. For only a few examples of this conceptual tendency, see Blumer's treatment of ideology (1951), Smelser's concept of the generalized belief (1963), Turner's concept of emergent norm (1964), and Brown and Goldin's concept of collective constructions of reality (1973). The term "ideology" as used in the present discussion is largely consistent with conceptual definitions advanced by these writers. Thus, by ideology is meant the widely shared and explicitly stated goals, objectives, and beliefs which serve, in this case, as the foundation or justifications for the new and different strategies and tactics promoted by the community mental health movement.

2. While there is fair agreement on what distinguishes the community mental health approach from the more traditional mental health orientation, different writers tend to emphasize various dimensions (e.g., Baker and Schulberg, 1967; McGee, 1974: 33-39; Fisher, Mehr, and Truckenbrod, 1974: 96-165, 267-292).

3. For a treatment of the community mental health approach as a social movement, see Ewalt and Ewalt (1969), Mauss (1975), and Hobbs (1964) who attach the stronger label of "revolution" to describe the community mental health approach.

4. For a more detailed discussion of the medical model, an approach heavily dominated by the theories of Freud and his followers see Fisher, Mehr, and Truckenbrod (1974). See also Mauss (1975: 359) for an insightful examination of the continued prominence of this conception.

5. For a more detailed understanding of this position, the writings of the following thinkers are helpful: Goffman, (1961), Caplan (1964), Szasz (1961), Stanton and Schwartz (1954), Cumming and Cumming (1962), and Skinner (1971).

6. For documentation of this, see the comprehensive report on community mental health centers by Franklin Chu and Sharland Trotter (1972), completed under the direction of consumer advocate Ralph Nader.
7. Crisis intervention techniques and more traditional clinical approaches are also in direct opposition as far as other key issues are concerned. On the one hand, the traditional clinical approach is largely a passive, non-directive one, the success of which partly depends on the establishment of a rather long-term and confidential relationship between the therapist and the client, or, to use the Freudian term, transference. On the other hand, crisis intervention employs active, direct and immediate short-run assistance to alleviate both the personal and social difficulties of the disturbed individual. To provide this assistance requires considerable intervention in both the personal and social affairs of the client and, thus, traditional norms of confidentiality are dispensed with between the care-giver and the client. Needless to say, these differences in viewpoint about the matter of confidentiality often make continuity of care between different units in a system operating with different models almost a complete impossibility.

8. Because of this concentration on individual techniques, it is not unusual to encounter outpatient clinics which maintain three to six months waiting lists of patients who need service, a demand the clinics are typically unable to meet.

9. As a matter of fact, the early withdrawal of federal funds from community mental health centers has produced another serious problem for 648 Boards around the state, and one which promises to produce even sharper conflicts in the future. This is the problem of "who is going to provide the funds for these expensive facilities?"

10. In fact, in some cases these other groups are organized into service delivery networks that, by and large, constitute separate, different, and completely independent systems of mental health care. According to Zusman (1969), it is typical for large urban areas to have four such separate systems which operate in somewhat different, but overlapping domains. These are: 1) the state hospital system which largely services seriously ill patients from lower socio-economic backgrounds; 2) the university system which treats middle class moderately disturbed patients; 3) the private practice system which treats a broad range of disturbances in clients mostly from the middle and upper socio-economic classes; and, finally, there is 4) the community system supported by public funds and governmental subsidies serving a broad cross-section of client problems and socio-economic groupings.

11. Because of the relatively small size of Greene County, it was decided that the 648 Board should embrace two contiguous counties, Greene and Clinton with about 150,000 persons.
12. In fact, an effort at that time to institute community consultation services was vehemently opposed by the United Fund which threatened to terminate the Guidance Center's funding if other than direct services were offered.

13. The Guidance Center, despite its requests, was left completely out of this program. It was categorically denied permission to approach a patient until that person was released from the hospital and a referral had been made to the Center. The reason given was that the hospital physicians did not want "anyone doing anything with any of their patients."

14. The 648 Board had a contractual arrangement with the Greene County Council for Retarded Children. Funding through the Board was justified on the rationale that the projected program, not in operation at the time of the tornado, was a preventive mental health effort aimed at the families of the developmentally disabled. According to state law, 648 Boards have no responsibility for funding treatment of the retarded, except as it involves mental health problems.

15. The state guidelines in Ohio also recommend that the 648 community-based programs eventually institute the same ten essential services.

16. Of course, the delivery of direct clinical services is almost always more costly than the delivery of indirect services, if for no other reason than the lower client to therapist ratio necessary to provide clinical services. Even so, the allocation of 50 percent of the system's total funds to the Guidance Center, and 20 percent to Encounter does indicate something about the priorities of the system.

17. For an example of the various ways in which the environment of open systems have been conceptually defined, see the following writers: Dill (1958), Farmer and Richman (1964), Burns and Stalker (1961), Chandler (1962), Emery and Trist (1965), Lawrence and Lorsch (1967b), Warren (1967), Thompson (1967), Neghandi and Reimann (1973), Osborne and Hunt (1974) and others.

18. This model of service delivery is, in fact, rather prevalent around the United States in rural areas or areas where mental health programs have assumed a strong social action component. (See Kiesler [1965] and Peck, Roman, and Kaplan [1967] for a discussion of how in these types of service systems the mental health facility and other human service agencies work jointly with the same troubled individuals or families, cooperating in the development of new programs, and attempting to minimize competition with each other.)
19. As a matter of fact, those few relationships which did exist between the medical sector and the established mental health system, particularly with the Guidance Center, were of a conflict nature. The one exception to this was the Crisis Center which, because it was located in a medical building near the hospital, was able to develop some informal working relationships with particular physicians.

20. Ryan (1963) has characterized this tendency to perceive mental health as the central core around which all human services are delivered as "autistic," thinking it more realistic to view mental health as simply another subsidiary area within the broader community care-giving system of health, education, welfare, and social services.
CHAPTER IV

CHARACTERISTICS OF THE EMERGENT RESPONSE

This chapter, after a brief introduction describes: 1) the short-run collective response of the established mental health system to the disaster; and 2) the characteristics of the emergent mental health delivery system which developed in Time Two.

Introduction

New forms of collective behavior do not just suddenly come into existence as "full blown" collectivities operating with fully established goals, structural characteristics, and clearly organized activities. Rather, new or emergent groups typically acquire their structural characteristics, goals and objectives, and activities somewhat gradually through the course of their development. Such also was the case with the emergent system which came into being to provide mental health related services to the victims of the Xenia disaster. Therefore, to fully understand how the new system came into being and how it came to manifest a particular set of characteristics, it is necessary to trace the process through which it developed. In this case; this means examining first the ways by which the established mental health system attempted to respond to the disaster. For it was the established system's inability to generate the capability necessary to meet the new and different demands created by the disaster which ultimately led to the emergence of the new disaster-related mental health delivery system.

This chapter starts out with a description of the short-run response of the established mental health system to the disaster, i.e., its response during the first few weeks after the tornado when the emergency was at its peak insofar as disruption of community life was concerned. The second section of the chapter is devoted to an examination of the eventual outcome of these early attempts to mobilize some type of mental health related response, in other words, the full emergence in the long-run Time Two period of a new or emergent disaster-related mental health delivery system.
The Short-Run Collective Response

During the first few weeks after the disaster there were three somewhat vaguely distinguishable phases to the delivery of disaster-related mental health services.1 First, very little happened the night of the tornado or in the three to four days afterwards, although at least one 648 contract agency, the Crisis Center, was very active, and a number of peripheral social service organizations were very heavily involved in responding to the disaster. Yet, for all practical purposes, there was no delivery of services by the established mental health system in the immediate Time Two period.

This initial lack of response was then followed by coordinated and uncoordinated efforts to mount an organized response of some kind by the mental health sector. This second phase was manifested in a series of inter- and intraorganizational meetings often dominated by groups from outside the Xenia area who were, however, exerting pressure on the 648 staff to take the lead in organizing the disaster response.

Finally, after a week to ten days, an attempt was made -- abortive as it turned out -- to implement a very complicated plan of service delivery designed to treat possible cases of mental illness expected among the victim population. In addition, training sessions were set up by the 648 staff to sensitize a range of health, medical, mental health, social service, religious and school personnel to some of the psychological consequences of disasters. However, apart from these activities most of the other components of the established mental health system still did not become involved in the efforts to deliver services to the impacted population. Even the Guidance Center, a central component of the system which might have been assumed to play a central role in the short-run response, although it did consider many possibilities for delivering services, was never able during this time to provide much by way of actual services to victims.

As implied in the previous paragraph, the short-run response of the first ten days or so assumed that the services to be provided should be geared toward treating an anticipated rise in mental illness among the impacted population. The following remarks made by one mental health professional working in the Xenia area are indicative of the expectations held by several in the first few days after the tornado.

We were beginning to get reports that some people were kind of disturbed, hysterical and upset. We got reports the first day -- and I never had this verified -- but we had reports... We had one report that a person had been brought from Xenia to Miami Valley Hospital with a psychotic episode. I don't
know if it's true. I just never had -- at that point nobody was really verifying this sort of thing. Had also a report of a couple of people that were psychotic at Greene Memorial Hospital in Xenia. So it, you know, it seemed to me that the concerns I had would be verified from the stuff that was just sort of drifting in.

However, while this was the dominant orientation, it was resisted by some, most notably the coordinating core of the established mental health system, the 648 staff. In other words, not all groups agreed as to what kinds of services were needed, nor even whether services of any kind should necessarily be provided. There were some groups and individuals, including members of the 648 staff, who clearly believed that the system should respond by offering more preventative and indirect kinds of mental health services, rather than more clinical ones. However, as will be demonstrated, what was actually attempted in the short-run Time Two period amounted essentially to the implementation of a medically-based model of service delivery in community settings.

The Immediate Emergency Response

As a result of the disaster impact the capabilities of the established mental health delivery system were damaged or reduced in different ways, thereby making an immediate response in the first few days all but impossible except by one of the components. The Guidance Center, one of the major subcomponents of the system, was virtually demolished. The 648 Board offices themselves were also hit, forcing the staff to relocate for almost six months in temporary headquarters at a church. In the first few days almost all components of the system suffered from disrupted or limited electric power and telephone services, and, in many cases, the absence of personnel. A number of key personnel in the system had their homes hit by the tornado, or had their personal and family life so disrupted that they could not fully carry out their usual work roles. For the first few days there was little if any communication between the 648 staff and Board. As a matter of fact, neither outside groups such as the district mental health office nor local contract agencies were able to communicate with the executive director of the 648 staff until three days after the tornado hit.

The one formal component of the mental health system which was capable of responding immediately to the disaster was the Crisis Center. Its facility was not only undamaged but, somehow, a single phone line remained open to the agency after the tornado impact. Equally as
important, the Center operated within a crisis intervention-telephone hot-line format. On an everyday basis, its two paid staff members had the assistance of approximately 25 volunteers of which only a few worked at any given time.

With its telephone and building intact and a number of volunteers on which to depend, the Crisis Center was able to begin operation within only a few hours after the tornado impact. The local radio station, after being informed that the Crisis Center was operational, began broadcasting the phone numbers of the Center as a place to call for information on missing persons. Subsequently, the agency became a major source of general information as well, since, as might be anticipated, dozens of callers did not confine themselves to asking only about the missing. Insofar as calls were concerned, the Center took on many of the functions that Rumor Control Centers sometimes assume in different kinds of community crises (Ponting, 1973).

A more quantitative indicator of this temporary but radical shift in tasks is the observation that the Center had 4,134 disaster-related contacts in the month of the tornado, ten times the average monthly rate for the six months prior to the disaster. Of these contacts, 1,834 were of a general information nature (e.g., where were other agencies located?, what grocery stores were open?, etc.); 1,562 were about missing persons; and 384 had to do with legal, consumer and insurance matters. The general information contacts were 16 times as great as the number of such kinds of contacts in the previous month of March. Most of these contacts were phone calls, but about 720 requests for information came from people walking into the Center's building. The non-disaster-related contacts in the same time period amounted to 312, a figure not significantly different from the average monthly rate. However, while contacts concerned with pregnancy, suicide, depression and family problems remained quite stable through this time period, drug- and alcohol-related contacts dropped substantially, compared with the average of the previous several months.

Within 48 hours the Crisis Center had compiled a "Disaster Fact Sheet", listing the available sources of food, clothing, shelter, medical services, etc. It worked with the Red Cross and the police in compiling a central missing persons list and took on such other non-traditional tasks as obtaining ice for the hospital and providing labor to help unload a truck carrying paint which had been donated to the area. What the agency did was a very useful and needed response to hundreds of demands, but it extended its activities into what would not usually be called mental health services in the narrow sense of the term. To the extent that the Crisis Center undertook new tasks in the immediate Time Two period, it was dealing with immediate material or informational emergency needs or, more generally, problems in living. Thus, while this established agency engaged in rather novel and unusual behavior, it did not really expand its standard mental health services.
But just as the Crisis Center provided practically nothing in the way of specific mental health services in the first few days, neither did other organizations. Various social service agencies were, of course, heavily involved in providing their kinds of services, and the Red Cross kept open several shelters for some time. Indirectly, it might therefore be supposed that some "quasi" mental services were probably almost incidentally provided to some victims. Yet, by and large, the emphasis during this period was on meeting the immediate emergency needs of a material or informational nature, or, in general attending to the victims' problems in living. Apart from a few ministers consoling the families of victims, often right in the impacted neighborhoods, any other more specific mental health related services delivered during these first few days after the disaster were probably offered in a rather ad hoc fashion by a few scattered individuals who, on their own and independent of one another or any group, went into some of the shelters. One such volunteer, a psychiatric social worker, remarked of her experiences the day after the disaster in an interview with one of the field workers:

I remember going over to the Red Cross and offering my services. The place was full of people milling around. I spoke to a man from the Red Cross, I don't remember his name, and offered our services. And he said, "That's fine, but at this point we're not ready for mental health services. We need to answer the physical needs first, but we will probably be calling on you later."

All in all, it seems quite safe to say that despite the active involvement of one component of the mental health system, several social service groups, and an indeterminate number of the clergy, almost no mental health services were provided at the start of Time Two. In fact, the established mental health system, as such, did not really respond. Actually, for several days most of the system, to the extent that it was active at all, was primarily engaged in housekeeping chores, such as locating new temporary quarters, securing files, and generally restoring office routines. It was fully five days after the disaster, on a Monday, before efforts were made to plan and coordinate, via the 648 staff, an organized delivery of mental health services in response to the disaster.

Initial Planning

Prior to the key Monday meeting, there were a variety of organizations who were groping toward setting up some type of large-scale
mental health related services in response to the disaster. However, many of these planning efforts were undertaken prior to and totally apart from the activities of the 648 staff. For example, the first category of organizations involved in immediate post-impact planning were extra-community groups. This included both regional and federal representatives of the National Institute of Mental Health (NIMH) who were in contact with district and state officials from the Division of Mental Health in the Ohio Department of Mental Health and Retardation. Not only did this lead to the direct involvement of the state division of planning activities, but the district office located in Dayton contacted other formal mental health groups in that area who thereby also become involved in the effort.

The second category of organizations taking part in some type of planning activities prior to formal meetings called by the 648 staff consisted of some of the official contract service agencies or components of the community mental health delivery service system. Some of the agencies attempted to forge their own response to the disaster, independent of the 648 Board and staff. The Guidance Center particularly stood out in this respect.

Even prior to the first Monday meeting, mentioned earlier, the Guidance Center director suggested that any available members of the staff work in the three Red Cross shelters or centers assisting people who were experiencing serious emotional and psychological problems. Although these efforts were never formally organized, a few staff members did spend some limited time in the shelters during the first three or four days after the tornado. As it turned out, these workers reported that there was little need expressed for counseling in the centers. However, this did not really surprise the Guidance Center staff. That there had been a great deal of uncertainty surrounding the decision to work in the centers in the first place is reflected in the following remarks of one of the staff members:

I anticipated that these people working in the Red Cross Centers would be extraneous and not provide much of a service at all at the centers anyway. And I figured that the Red Cross people would be annoyed in having additional people coming around. I just figured that there would not be a need for mental health services at these places. But we had to anticipate that somebody might say "Your agency didn't do anything to provide mental health services immediately after the disaster." And there was just the outside chance that there would be people breaking down in emotional distress in the centers. We really had no idea whether there would be or not. So, on that chance, we tried to cover all bases.
Confronted with the major problem of finding temporary facilities to house the agency, the Guidance Center met as a whole on Sunday evening, four days after the tornado. No contact had been established with the 648 staff. Nevertheless, at the meeting consensus was reached on two basic strategies to be taken by the Center. First of all, realizing that their volunteer efforts at the shelters had been unsuccessful, it was decided that the agency should assume more of an outreach approach in working with disaster victims. This was in contrast to the Center's usual office-centered treatment. But it was thought that perhaps rather than the regular staff, volunteers who were already making themselves known to the agency, could be utilized for this activity. Secondly, all staff members would continue to contact and be of assistance to their existing or former clients. Meanwhile, the effort to find more permanent office space continued, although some very temporary quarters had been located. In this connection, almost immediately after the impact of the tornado the Guidance Center had contacted Yellow Springs Encounter to request their assistance in staffing what remained of the Center's building so that the Guidance Center staff would be free to evacuate the facility.

Thus, these two agencies sought to some degree to develop a cooperative response to the demands produced by the disaster. The activities of the Crisis Center have already been noted. Even before the mass planning meetings were held, and even prior to any formal contact with the 648 Board or staff, some of the contract agencies tried, in some cases independently and in some cases together, to develop some ideas about how they might respond to the disaster.

Of course, myriad other organizations outside the boundaries of the formal mental health system undertook a variety of information gathering and planning efforts on their own. These included among many others such groups as the Red Cross, Catholic Social Services, local clergymen, school psychologists, Community Action Council, and Family Services. Although many of these groups eventually were included in later planning meetings held by the 648 staff, they, however, designed and undertook a considerable amount of action prior to and independent of the 648 staff in the first few days after the tornado.

Thus, even before the key Monday meeting, congeries of nearby and outside mental health groups, contract agencies and social service organizations had already discussed and initiated plans of action which were to have a significant effect on what was to happen. It is perhaps not amiss to note that while personnel from these various organizations did not agree, in interviews with DRC, about all the details of who did what and when in the first five days or so, there was consensus that: (a) very little, if any, mental health related services were provided by anyone; and (b) the 648 Board and staff did not provide any initiative for planning or action in that time period.
Key Meetings

A series of rather crucial meetings occurred on April 8 and 9, the Monday and Tuesday after impact. Representatives from national, regional, state and district mental health organizations and the two most immediately affected community mental health systems, i.e., from the Dayton area as well as Greene County, contacted each other and agreed to meet in a restaurant between Dayton and Xenia on Monday, April 8. Numerous topics were discussed at this meeting. They ranged from a suggestion to identifying oneself in the field as "crisis workers" rather than "mental health" personnel, to discussing possible sources of funding which might be available for the disaster-related service delivery, to assertions that young children were the most vulnerable segment of the victim population. Participants were given an extensive briefing by an NIMH representative on the possible range of individual reactions to extreme stress situations such as the tornado, although as noted earlier, there were selective perceptions about the specific content of the briefing and what was or was not emphasized.

Almost all of those present at the meeting had considerable experience in the administration and delivery of mental health services. But most were rather uncertain, initially at least, of what might be the appropriate organized mental health response to the Xenia disaster. That an immediate response on the part of the local community mental health system was necessary, for instance, was not "obvious" to everyone at the meeting. In fact, one of the key representatives from Xenia felt that physical needs should take priority, and that it should not be anticipated that many persons in the impacted area would have immediate need for services from mental health agencies. On the other hand, the consensus that emerged among some of the participants from the Dayton area, as well as among representatives from the state of Ohio, was that there had been a severe breakdown in the physical, social and psychological environment, and that immediate and large-scale organized action was necessary to prevent the surfacing of all sorts of mental illness and mental health problems in the not too distant future. They argued for the development of a variety of new disaster-related services to be carried out under the auspices of the 648 Board and staff. Representatives from NIMH urged the setting up of outreach programs which would go out into the community to locate and provide services to disaster victims, rather than waiting for victims to come to the agencies and request assistance. The idea was also stressed that local indigenous persons should provide most of the disaster-related services in order to prevent polarization against "outside specialists" and to insure continuity between the immediate remedy and long-term recovery when "outsiders" would no longer be present.
There was obviously some irony in the situation not appreciated, however, by all the outsiders present. Even at this point, some of the indigenous leaders strongly resisted the general definition of the situation advanced by the non-local people. They did not believe that there was or would be any great need for mental health services following the disaster. As one local participant said:

There was nothing really that mental health could do for the people right away. I sort of took the position that maybe mental health people ought to take a vacation, and all of these social workers that had come over from these agencies ought to go home... I didn't feel that mental health was going to be able to help the victims.

In addition, there was resistance to what some of the local people perceived as considerable pressure from outsiders, who, although they had not yet even been to Xenia, were trying to force the locals to set up an immediate and specific type of response to the disaster. Pressure was perceived, whether intended or not. This generated considerable resentment and resistance when it became coupled with the usual negative view that disaster victim populations and groups develop about outsiders who inject themselves in the local scene. As other DRC studies have shown, outside organizations in disaster settings, unless they move with exceptional caution and tact, will become rather negatively viewed. This is a lesson which federal agencies dealing with state and community groups, and the national Red Cross interacting with its local chapters (Adams, 1970), learned a long time ago. Some of the mental health personnel present at the meeting were very sensitive to the possible polarization which might occur. However, they seemed not to apply this knowledge to the activities taking place at the very meeting where the possibility of the problem was voiced.

At this first meeting no formal decisions were explicitly made, but a number of implicit agreements were understood as having been reached by many of those present. It seemed generally agreed that the 648 staff was to take the lead in organizing the mental health related response to the disaster or, in the words of the notes taken by one participant, "will be in charge of coordinating mental health efforts." It also appeared to be implicitly understood that some kinds of outreach programs would have to be developed, including sending agency personnel to the shelters, visiting the families of dead victims, and perhaps launching a door-to-door seeking of persons who might need other than physical or material assistance. There also seemed to be an unspoken belief that someone was going to have to make an inventory of mental health related resources available in the area and serve as a central source of information for other human service groups. Another major priority agreed upon was that the mental health care-givers
themselves would be in need of psychological and emotional support during the stressful period following the disaster.

Perhaps the most unclear outcome of the meeting was the matter of who was specifically going to do what. Apart from the general feeling that the 648 staff should take the lead in coordinating the response, there were few specific assignings of responsibilities to the various groups and agencies in attendance. Nevertheless, this first meeting was very important, for it provided the initial impetus for an organized effort to deliver mental health related services in the aftermath of the Xenia tornado. The meeting brought about actions, even though in some cases perhaps not quite was intended. The deliberate and almost sarcastic words of a 648 staff member reflect the ways in which some of the suggestions made at this meeting were followed.

...about using indigenous community leaders. This was the process that came out as important at the first meeting on Monday. We set up two emergency teams. We hired two women to coordinate these teams, essentially to go out and visit people. This utilized a lot of people wanting to volunteer, you know, the people from Dayton (sic).

Still other meetings were held that day. A representative of the American Red Cross was contacted by several of the mental health system leadership hoping to construct a joint program for meeting the immediate needs of the community. Mental health services are not typically provided by the Red Cross, and the organization is traditionally very reluctant to let any other group become involved in its own operations. There was, therefore, some resistance to complete cooperation with the mental health system leadership. But the fact that one of the staff members of the Greene County 648 Board had previously worked with the Red Cross and thus had prior contacts within the organization served to facilitate negotiations. Thus, within 24 hours, agreement was reached that the shelters could be used by personnel from the mental health system as a place to locate and provide services to victims displaying emotional and psychological problems in connection with the disaster.

The Three Stage Plan

Still another key meeting was held the following day by a smaller group of decision-makers. It involved representatives from the district mental health organization, the Dayton and Greene County community mental health systems, a few Dayton psychiatrists, and key
representatives from social service agencies in Greene and Montgomery counties. A rather detailed plan for delivering mental health related services to disaster victims in the Xenia area emerged from this meeting. Possibly because of its later failure, in retrospect, no one cared to claim prime authorship of the plan, although it was agreed that it was not attributable to a Xenia area representative. Referred to generally as the "Three Stage Plan," it involved the creation of three types of temporary centers linked to one another by stages. The first stage would make referrals to the second, and the second would make referrals to the third.

According to the plan there were to be five First Line Centers, as the first stage was called, which were to be located at specific disaster shelters and one-stop centers. These were to provide emergency counseling, support and information for disaster victims, and, in the case of more severe emotional problems, to direct the victims to a Second Line Center for more intensive psychological counseling. Each First Line Center was to have a coordinator who would be responsible for scheduling of volunteers, emergency transportation, consultation with counselors, referrals to Second Line Centers and other agencies, and maintenance of a simple system of records. These centers were to be staffed by seminary students and other persons with counseling experience.

The Second Line Centers, of which there were to be three, would provide in-depth counseling interviews for persons referred from the First Line Centers. The Second Line Centers would be staffed mainly by clinical psychologists and social workers from the Dayton mental health centers, and would be spatially isolated from the First Line Centers in order to provide the greater privacy necessary for more intensive counseling. Each Second Line Center was also to have a coordinator. Referral of patients to the Third Line Center, scheduling of the staff, and maintenance of a system of records were among the responsibilities of the coordinators of the Second Line Centers.

The final step in the plan called for a Third Line Center or psychiatric unit which was to be located at Greene Memorial Hospital. The Third Line Center would be staffed by a psychiatrist, nurse, social worker and/or psychologist, and a mental health technician. Presumably only serious cases would be referred from Second Line Centers to this unit, although patients in the hospital who were "disturbed" would also be treated.

Other Plans

Over the next few days still other meetings were held as the 648 Board, through its staff, struggled to assume the local leadership in
planning and organizing the delivery of mental health related services in response to the disaster. Plans were discussed to conduct a community-wide survey to assess the emotional needs in the area, although this project was fairly soon undertaken by a non-community mental health system group, the Xenia Area Interfaith Council. Plans were also considered to strengthen existing services by adding some additional personnel and providing limited training programs for agency staff, mental health "gatekeepers", school personnel, and disaster workers. Arrangements were also developed to bring in a consultant from a mental health organization from outside the state, as well as for other training programs to be conducted jointly with the Office of Education and Training of the Ohio Department of Mental Health.

Funding for these new and expanded services was not considered a problem. Almost immediately after the tornado the Ohio Department of Mental Health promised that "additional expenses incurred by the 648 Board as a direct result of the disaster would be funded on a 100 percent basis for a temporary period of time." The monies were to come from two sources. First of all, approximately $20,000 of unspent state Greene County per capita mental health money would be returned to the 648 Board. Secondly, the 648 Board was encouraged to submit a proposal for any additional funds that might be needed. The reaction on the part of several key mental health staff members in the Xenia area was that whether or not the local community mental health system needed to be changed drastically to deliver disaster-related mental health services, this almost blank check policy implied that the state was in favor of doing something of a major nature.

The picture which comes through at this point is fairly clear, especially when viewed from the perspective of the 648 staff, the major planning core of the established mental health system. Outsiders were seen, and probably accurately, as pushing hard for the initiation of new services in response to the disaster. In fact, the belief that there would be a demand for mental health related services right after the disaster was by far more strongly held by outside groups than by the 648 staff. Most of the services originally suggested, especially the Three Stage Plan, had been created and advocated by non-local people unfamiliar with the Xenia situation. Mental health representatives from the state level had further supported the idea of new and expanded services by offering to fund the disaster-related programs. In other words, from the perspective of the 648 Board, they were being urged to take the lead in planning and coordinating new organizational arrangements and patterns of service delivery which had actually been proposed and advocated by outsiders.

The degree to which this pressure was perceived by local mental health personnel comes out clearly in the remarks of one key official from the Greene County mental health system who, in an interview, stated the following:
Everybody was descending on us. "What's the plan? What can we do for you? Set up some kind of plan!"
Now I don't know. I guess with the kind of job experience that I've had, I didn't really feel like I was the worst planner in the world. But I didn't have a plan at the moment. All of these people hollering at you what can they do. If I was going to plan, I wouldn't have had all of these people around. I don't think that you can sit down and do basic planning with a roomful of people.

Complicating the situation further was the concurrent planning of certain local groups and organizations, who were outside the boundaries of the 648 community mental health system, but who attempted to organize disaster-related mental health services. For example, during the first ten days after the tornado, administrators and physicians at Greene Memorial Hospital held a number of meetings to assess the anticipated need for mental health related services at the hospital following the disaster. Initially these discussions were independent of planning elsewhere, although eventually the provision of psychiatric services at the hospital was included as one component of the Three Stage Plan. Discussions were also held centering on how the staff might recognize those suffering more severe emotional problems who could be referred to the psychiatrists located in the hospital. At one point hospital personnel came up with their own plan that called for mobile units to be stationed at the hospital, housing psychiatrists and other mental health workers who could screen and provide individual and group therapy to disaster victims. This plan, however, collapsed as a result of an almost non-existent demand for the services. But, even though the hospital undertook its own planning efforts, complaints were made about being left out of the overall planning carried out under the auspices, although by no means the initiative, of the 648 staff. In this connection, one Dayton mental health official stated the following:

I got a call from the health department which was distressed at the lack of coordination and inclusion of the agencies in the mental health planning. I guess several agencies were distressed that they were not being included, particularly the Crisis Center, the hospital and the health department.

Additionally, as already indicated, the local social service and welfare agencies initiated their own planning efforts, many of which had some direct implications for the activities of the established mental health delivery system. Since a problem of coordination among the various community care-giving agencies was recognized early, the local Health and Welfare Planning Council, a United Fund agency, initiated weekly meetings among representatives of a range of health, welfare, and social service organizations in Greene County. Such
interagency meetings had been attempted in the past, but had failed because of a lack of interest. The disaster, however, provided the necessary impetus to their renewal. Although representatives of the established mental health system were included in these meetings, issues regarding mental health service delivery were only a part of the larger and more general social welfare concerns discussed and contemplated at these weekly interagency meetings.

To summarize, the above overview has depicted much of the rather complicated coordinated and uncoordinated planning which occurred in the immediate aftermath of the disaster. Yet it was almost a week after the disaster before the established local mental health system started to develop any plans whatsoever, and, even then, much of the impetus came from extra-systemic sources. But if these were the plans, how were they implemented?

Attempts at Implementation

The major effort that was made in the Xenia area to deliver mental health services in the first two weeks or so after the disaster was essentially the attempt to implement the Three Stage Plan. This effort to create an emergent organization failed, however. In the meantime, other planned activities, such as the training of mental health personnel to cope with the special disaster-related mental health problems which outside consultants predicted would occur, were initiated.

Failure of the Three Stage Plan

This plan was very short lived. Within seven days two of the First Line Centers were terminated because the disaster shelters in which they were housed closed, and the remaining three centers had been radically transformed: one into a kind of pastoral counseling center, another into a Second Line Center, and the third into the focal point for the needs assessment survey of the community. Unlike some of the programs that were to be developed later, the majority of the volunteers for the Three Stage Plan were highly trained mental health professionals, such as psychiatrists, clinical psychologists, psychiatric social workers, mental health technicians, etc. Many of these volunteers came from one of the four mental health centers in Dayton. In some cases their employers not only gave them time off with pay, but also arranged transportation. Although supplying a somewhat smaller
percentage of volunteers during this early period, seminaries in the Dayton area were also a major source of volunteers, providing students who had strong interests in the area of pastoral counseling.

In most instances, the First Line Centers consisted of a table staffed by anywhere from zero to about 15 persons at any particular time. The mental health skills of these volunteer staff ranged all the way from their being highly trained clinical psychologists to seminary students. Very few victims came to the counseling tables, so several of the volunteers spent their time mingling among those present at the shelter. A good deal of the activity of the volunteers was devoted to gathering names of persons around the shelters who, whether by their own admission or in the estimation of the volunteer, needed some sort of emotional help. The names of these persons were, in the first few days, passed on to the Guidance Center and, after that, given directly to persons conducting an overall needs-assessment survey.

For the most part, the volunteers attempted to supply short-term supportive services such as running errands, guiding victims to the appropriate agencies, and generally attempting to make the situation less imposing. A father who had lost a son in the tornado needed a babysitter while he made funeral arrangement. His other son had received a head injury in the tornado and wanted a cowboy hat to cover the wound. Not only did a volunteer arrange babysitting, but she searched through the town until she found the cowboy hat as well. This was typical of much of the "counseling" that was done. Therefore, although it appeared that at least some of the volunteers were kept rather busy, their activities did not conform to the expectations of those who had proposed the Three Stage Plan.

As one highly skilled professional noted of his experience:

We were at Shawnee initially. For a couple of days it was the one-stop center. They had tables set up for HUD, for Red Cross and a table for unemployment benefits, and so forth. And way over in the back there was a mental health table. In fact, that was the sign they had up on the wall -- mental health or counseling. So the intent was that people who felt they needed counseling and just wanted to talk would come over to the mental health table and request some services. Well, we soon discovered that nobody was coming...

As it turned out, there weren't a lot of cases to be found. Now I was talking about the individuals we encountered in the first few weeks who were really distressed, were needing medication in some
cases and so forth. But hell, there were only six or ten of those people out of the literally thousands who were processed through those places. So there were not a lot of traditional kinds of cases which was why the plan didn't work, why it just fizzled out and eventually died...

These psychiatric social workers quickly discovered that there wasn't such a strong call for that kind of expertise. Instead of needing a lot of counseling skills, they needed to have some ombudsman skills. They needed to be expediters, to know where all these services were located so they could steer people there and get them through the red tape and all that... What was needed, I think, in retrospect, was just providing a listening ear, an ombudsman kind of service, an expeditor kind of thing.

As it turned out, some shelters not only had a shortage of victims seeking mental health related services but a shortage of those seeking physical services as well. The volunteers at these shelters complained that they sat around and did nothing, for even the activities that consumed the time of the mental health volunteers in the more active shelters were not open to them. This situation was apparent in two of the five shelters designated as First Line Centers, and both shelters were closed within three or four days after the institution of the Three Stage Plan.

As has been outlined, the original plan called for the referral of persons needing more extensive mental health treatment to the Second Line Centers. As it occurred, however, there were only a few referrals made from the First Line Centers, and most of these were referred directly to Greene County Memorial Hospital. The onslaught of victims with severe psychological impairment and disorders that some had expected did not materialize, and the volunteers at the Second Line Centers often had little to do. The Guidance Center, for instance, quickly pulled out of this program, abandoning its function as one of the Second Line Centers. Thus, in regard to the Three Stage Plan one participant noted the following.

After that three stage fiasco was implemented, it wasn't very effective. It was a waste of mankind. There were people sitting at the Second Stage Centers playing the piano and twiddling their thumbs. There was nothing to do with the really well-trained people.

I know, for example, when I was there that there was no one from the Guidance Center giving a call
saying, "Hey, we're glad you've over there. We've got two dozen people here that maybe you could come over and see, or we'll send them over or whatever." I'm saying the void, the absolute absence of any communication, was incredible... There must have been some knowledge, for example, that the Dayton Mental Health Center was sending over three teams with three people each day for five days. I couldn't fathom that not being known... I was concerned -- many of us were concerned. What were we doing there? Here we were sitting in this place... No one showed up. Here it was Monday, then Friday and only a few people had a couple of contacts with victims.

As stated above, the few referrals made from the First Line Centers were made directly to the hospital, the Third Line Center. Yet, of the estimated few dozen persons treated by the Third Line Center, the majority were not referrals. Instead, they had come directly to the hospital, totally bypassing the first two stages of the Three Stage Plan.

The Third Line Center was in the board room in the basement of the hospital. Its staff consisted of a psychiatrist, nurse, social worker and/or psychologist, and a mental health technician, the traditional clinical treatment team. Patients who came into the hospital for physical treatment who, in the opinion of nurses, physicians or others working in the hospital, had exhibited symptoms requiring mental health treatment were directed downstairs to the board room which housed the center.

However, several persons who were treated by the staff at the center merely "wandered in," contributing even more to what was one of the major impediments to adequate psychiatric treatment, an incomplete data base or case history of the patient. In most cases, patients treated at the Third Line Center were seen by teams who had little or no knowledge about how the patient got there, much of their background, and to what extent, if any, the conditions of the patient were related to the tornado or other factors. It was reported that about four such patients were referred from the hospital or other sources to the Dayton Community Mental Health Center, a state mental hospital; and, according to accounts that DRC could not confirm, some of these patients were temporarily institutionalized. However, confirmed or unconfirmed, there is no question that some mental health personnel in the Xenia area believed that such institutionalization had occurred, and they were very sharply critical of the procedures involved, believing them based on incomplete information for proper diagnosis. Even though some of these few cases allegedly were former state hospital patients, certain mental health professionals thought that there were some highly questionable legal and ethical implications involved in what had been done.
In summary, therefore, the Three Stage Plan failed to materialize as it had been proposed. The activities of the volunteers at those shelters which remained open consisted mainly of running errands, helping people negotiate their dealings with non-mental health agencies, providing some sort of vague support for the disaster victims, and, in rare instances, providing treatment through more traditional therapeutic and clinical strategies. The Second Line Centers were almost totally bypassed. The referrals made to the hospital were far outnumbered by the patients needing mental health care who were referred directly to the Third Line Center by physicians in the hospital. In short, by widespread and common agreement, the Three Stage Plan was judged a totally inappropriate arrangement for the delivery of services in the situation in which it was used. Or, in the words of one key mental health official, "that plan was a magnificent failure." Few services were delivered under the plan, and the participant care-givers were strongly disillusioned, if not actually bitter, about the way they had been used.

Other Implementations of Plans

Special training sessions for mental health personnel were begun as early as the second week after the tornado. In one case, a consultant brought in five times by the 648 staff spoke to a variety of persons, including traditional mental health workers, social service personnel, clergy, persons from the medical area and the schools, and even bartenders and beauticians. The primary goal of these, as well as other training sessions, was to sensitize these other community care-givers and "mental health gatekeepers" to the supposed psychological consequences of disasters. By facilitating their recognition of these assumed consequences, it was thought that these more peripheral groups and individuals might be able to provide some limited mental health intervention to larger numbers of the victim population than could be served by the established system alone.

The sessions received a rather mixed reception. Some participants were very skeptical about what they were told, noting there was great incongruity between their own personal experiences in other disaster situations and what the consultant projected. They questioned whether observations derived by the consultant from clinical observations in acute personal situational crises could be projected or extrapolated to large-scale community disasters. The anecdotal impressions said to have been cited by the consultant on the basis of one sole experience in a major community disaster did not seem a very sophisticated approach to less clinically and more scientifically oriented listeners. In other words, some persons exposed to the consultant discounted what
they were told from the very outset. Others, moreover, grew increas­
ingly skeptical in the weeks and months following when the predicted
mental health problems failed to materialize.

On the other hand, there were persons who accepted without ques­
tion the consultant's predictions as to what the community was likely
to face in the aftermath of the tornado. One social worker who ac­
cepted the consultant's opinions said that:

Something that was pointed out by one expert was
that we would have an awful lot of health prob­
lems after the disaster, like pneumonia and more
heart attacks. Also the accident rates and so
forth would go up at a very dramatic rate foll­
owing the tornado although it was said that the
accidents can't necessarily be tied to the di­
saster itself. But these problems are a sign
of the stress among the people following this
type of thing.

Taking these predictions quite seriously, a few were sensitized enough
that they later consciously attempted to seek out such signs of possible
difficulties.

Besides bringing in this consultant, the 648 staff was also able to
initiate other similar training programs with funding supplied by the
Ohio Department of Mental Health and Retardation. However, to the ex­
tent that the prior disaster experience of those conducting the sessions
was limited, those in attendance at these sessions frequently reported
that they had gained little insight into the possible long-run mental
health problems which they might expect in their own community in the
wake of the disaster, let alone how best to treat these problems.

At the same time that the above activities were going on, the
Guidance Center was also making plans of its own to deliver some specif­
cally disaster-related services. In the mean time, the Three Stage
Plan was emerging, designating a different function for the Guidance
Center, that of being a Second Line Center for intensive counseling.
In other words, decisions regarding service priorities and program
development for the agency were now being made at higher levels, that
is, by state, district, and 648 officials. Moreover, these were often
being made hastily and with little agency input. The following remarks
by a Guidance Center staff member reflect the agency's reaction to what
was occurring during the first week after the tornado:

I felt that this was an issue that was much larger
than this whole agency, and it was appropriate for
other people to get involved. I also knew that this
agency didn't have any money with which to launch
mental health programs, and I felt that it was appropriate that it be a community-wide project. So I was favorable to the idea of a lot of people coordinating efforts. I was later disappointed because I felt we were not really consulted, nor were any of the other mental health professionals or people in the agencies consulted in the plan that eventually won out, the Three Stage Plan which was just sprung on us and hoisted at us much against our objection.

An overall analysis of the Guidance Center's short-run response to the tornado indicates that, for the most part, the organization did not alter its tasks or services significantly during the first few weeks after the disaster. If anything, the Center had to suspend some of its usual delivery of services for a period of time as a result of the destruction of its facilities, although it did attempt to contact all of its current clients and even some former ones to indicate that the services of the organization were still available. However, this did not involve the offering of new services, and there is little evidence that the announcement of availability generated much seeking of services by those contacted. This latter statement is supported by the remarks of one Guidance Center staff member.

If you look at the records you will see that we had a low intake during the first few weeks after the tornado. And many clients called and said they would forego their regular appointments. You know, what we primarily ended up doing in order to respond in some way was to try to recontact our former clients to find out how everyone was. And very few of them needed our services at that time.

Thus, although there was discussion and even some tentative efforts to change the behavior of the organization in the early stages of Time Two, the Guidance Center, by and large, remained an established agency operating within its traditional domain. The informal in-shelter program had found few recipients. There was consideration given to developing more of an outreach human services strategy by hiring a new outreach coordinator. This idea did, in fact, eventually facilitate the appearance of an emergent group, the Disaster Follow-up Group. At one point, the agency even considered obtaining trailers to use as traveling offices in which they could go into badly impacted neighborhoods and provide individual and group therapy. But this and other types of outreach programs were never consistently implemented by the Guidance Center.

The Center did temporarily enlarge the size of its staff in an effort to cope with an expected increase in clients, although this increase never was manifest. Some volunteers were used to deliver
walk-in mental health related services as well as services to new clients referred to the organization by other groups. This freed the regular staff to continue to provide services to their usual clients. However, in actuality, there was relatively little demand for strictly mental health services, even from these new "clients" in the immediate emergency period. In short, the Guidance Center after the disaster reflected far more intentions and possibilities than actual behavioral changes insofar as the delivery of services was concerned.

Furthermore, none of the rest of the contract agencies delivered much of anything of a disaster-related nature in the emergency period. However, some of their personnel did attempt to provide certain services. For example, staff members from Yellow Springs Encounter volunteered some of their time to other groups which were actively involved in the disaster response. One of the staff, for instance, during a month's period counseled perhaps 50 patients at Greene County Memorial Hospital, most of whom were direct tornado victims. Another staff person did some counseling during the brief existence of the First Line Centers. In addition, at the request of the Guidance Center, some of the members of Encounter helped staff the Center through the weekend immediately following the tornado. However, these professionals reportedly saw only one client during that entire time.

The Role of the 648 Staff

As stated earlier, it was fully five days after the tornado struck before the 648 staff attempted to assume any leadership whatsoever in gearing up the mental health system to provide services in relation to the disaster. Yet this inactivity on the part of the agency represented not so much a shirking of its responsibilities as it did the belief that there was no necessity for action. This attitude is well expressed in the remarks of one 648 staff member:

There was nothing really that mental health could do for people on that Monday after the tornado... I had the conviction that nothing at that moment was going to happen to people's mental health, because they had too many other things to keep them occupied. Gee whiz, they didn't have time to have an emotional breakdown. It's later on when this might happen.

In other words, the 648 staff simply did not think that the victim population would have any great and immediate need for mental health services beyond those normally available in the community. However, it soon became clear that other influential local and extra-local groups
did not share this definition of the situation. Subsequently, the staff gradually attempted to carve out some type of organized response to the disaster on the part of the established mental health delivery system.

During the week following the tornado, the staff not only called the series of large-scale meetings of key agencies discussed earlier, but various other activities were undertaken by them as well. First of all, the community relations coordinator initiated the process of obtaining lists of victims from the Red Cross and HUD in order that contact might eventually be established with these persons by mental health organizations. Secondly, once the Three Stage Plan was implemented, the 648 program coordinator was assigned the responsibility of coordinating the volunteers working in the various shelters. This task proved extremely difficult to carry out. Despite the overall failure of the Three Stage Plan, through the efforts of this 648 staff member, some services were delivered at least at the federal one-stop disaster center. However, these services were not the kind envisioned under the Three Stage Plan, but mainly involved offering general information, emotional support, and other types of concrete assistance to victims trying to obtain basic social and welfare services at the center. The rationale behind these activities was described in the following way:

I feel the (Three Stage) plan came because people from the outside and people from the higher level were wanting us to have a plan. But I never thought people would need this type of mental health service. You know, I never even thought they would be having any real mental health problems or needs at that point in time. The moment I saw the plan I knew it wouldn't work, but they wanted something down on paper, and they needed a plan to use the volunteers from Dayton. So I guess I kind of ignored the plan and went on doing what I thought was really useful in the shelters, even if it had nothing to do with the actual plan.

Thirdly, the aftercare coordinator, the one 648 staff member whose position entailed the delivery of direct services, initiated contact with aftercare clients in order to help them obtain disaster assistance. And, finally, the 648 executive director met with a number of local and extra-local groups, such as the clergy, social service organizations, the medical staff of the hospital, and state and federal mental health officials in an effort to assess the mental health related needs, and to organize programs to meet these needs.

Hampered by the lack of office facilities for a week to ten days after the impact, the staff was unable to communicate with one another effectively in carrying out these tasks. Subsequently, not only did the
648 staff experience major difficulties in organizing and coordinating the overall response of the mental health delivery system to the disaster, but there was very little coordination of their own efforts as well. Therefore major decisions about program development, such as the Three Stage Plan, were often made in an ad hoc fashion without consulting other 648 staff members, relevant agencies, or even the 648 Board.

By the end of the first full week after the tornado, new problems confronted the staff. The Three Stage Plan had failed. New programs had to be designed to meet the needs of disaster victims. Subsequently, a staff had to be recruited to develop these programs, and special training was seen as necessary for these new staff and volunteers, along with the existing agency personnel. Funding for the disaster-related mental health services had been informally promised by the state Division of Mental Health, but this led to additional demands being placed on the 648 staff. In the first place, the state requested that the 648 Board submit a formal proposal containing a rationale and description of the disaster programs for which the funding was being sought. This was by no means a minor task to perform at that time. In the second place, the possibility of obtaining additional outside funds led all kinds of groups, contract agencies and otherwise, to approach the 648 staff for funding of various disaster projects. As one staff member remarked:

I mean we had every agency, and agencies I had never heard of, hitting us for money. And we didn't have any emergency money yet.

However, even when the requests seem justified, the staff was reluctant to act on these demands without the approval of the board. In fact, the 648 staff was actually quite dubious about the extent to which the state would actually follow through with its funding promises, and as it later turned out, their doubts were not unfounded.

In spite of all of this, by the end of the third week after the tornado, two new staff members had been hired to coordinate the outreach programs, other contact agencies had been authorized to hire temporary employees on a month-to-month basis, and plans had been made to bring in outside consultants to aid in the training of local mental health professionals and volunteers. At this point, as far as the 648 staff was concerned, the response of the mental health system to the disaster had been formulated and was complete. Yet, for the most part, final decisions about many of these matters had been made in a rather ad hoc fashion, and in the absence of consultation with other components of the mental health delivery system. In fact, it was not until about a month after the tornado that the entire 648 Board was to meet and, as will be discussed later, attempt to regain some control over decision making and the setting of priorities for the mental health delivery system.
It is evident that the leadership and coordination provided by the 648 staff in the first few weeks after the disaster was weak, a fact which members of the staff recognized. Nevertheless, by the third week after the tornado, several staff members had already returned to their pre-disaster ongoing task of formulating and developing the overall community mental health plan for the remainder of the fiscal year. While this plan was originally due in May, the state Division of Mental Health had provided the staff with an extra month to prepare it, obtain Board approval, and submit it to the state, since all of their prior written work on the plan had been lost when the tornado struck. Thus, having been more or less forced into a leadership role in organizing a mental health related response immediately after the tornado, the agency rather quickly abdicated all but the most basic administrative functions insofar as the disaster programs were concerned. For the most part, program directors, including the heads of the two new emergent outreach groups, were left to design and implement their specific tasks with little direction from the 648 staff.

Whether or not the 648 staff's assessment of the relative priority which should be placed on disaster-related mental health programs turned out to be correct is basically irrelevant. What does matter is that the inactivity of this agency in the first four days, justified or not, was to have profound implications for its subsequent ability to coordinate and administer the overall response of the mental health delivery system to the disaster. The continued reluctance to get involved and the relatively quick abandonment of all but nominal involvement in the provision of services were simply a continuation of the initial orientation.

The Role of the 648 Board

In principle, the 648 staff works under the general guidance of the 648 Board. The tornado struck on a Wednesday, one day prior to the regularly scheduled monthly meeting of the 648 Board. Since the 648 offices suffered major physical damage, the board meeting did not occur on that day. In fact, during the first three days after the tornado, there was virtually no communication between the 648 staff and the Board, with the exception of some informal conversations between a few individuals regarding their personal tornado losses. Then on the fourth day after the disaster, one typically active member of the 648 Board, who had been in contact with outside mental health groups from Dayton, got in touch with the 648 executive director. At that point, the board member urged the staff to organize some action on the part of the system in response to the disaster and to call a meeting of relevant organizations on Monday to initiate this process.
In the next three weeks there were, as described earlier, a considerable number of demands placed on the 648 staff from a variety of local and extra-local organizations. Subsequently, many decisions had to be made rapidly. Often these decisions were not only crucial insofar as the immediate disaster response of the mental health system was concerned, but they entailed making commitments which could have a significant impact on the future priorities of the entire mental health delivery system. For example, new and different programs were being considered, and questions were being raised about the need for special funding and how it should be allocated. Yet throughout this initial period, the board as a formal body played almost no role in decision-making with respect to the disaster response. There were one or two members of the board who did maintain regular ongoing contact with the staff throughout the emergency period. However, the roles they performed consisted primarily of assisting the staff in locating temporary office facilities and providing some source of informal board input into decision making. Thus, with the exception of these few board members, the 648 Board supplied little by way of formal leadership, information, or other resources in the first three weeks after the tornado. As evidence of this, one member of the board later stated the following:

There's been a great deal of concern about the fact that there wasn't more action more quickly on the part of the 648 Board in attempting to bring about some kind of more adequate response. People laughingly say, 'Where was mental health? Where was the 648 Board in all of this?' It was not until the next week, on Monday, that they got started. And there was nothing visibly concrete or any semblance of order even at that point to what they were doing.

It was not until about a month after the tornado that the full 648 Board held its first monthly meeting. This May meeting represented a turning point with respect to the role played by the 648 staff and Board in responding to the disaster. In short, the emergency period during which the 648 staff had made most of the major decisions about disaster programs and funding autonomously from the Board came to an end. At this meeting, an effort was made not only to return to normal Time One patterns of decision making and authority, but to the pre-impact task of developing the ongoing community mental health plan.

In general the short-run collective response of the established mental health system can be summarized in the following way. In the first few weeks after the disaster, the major effort to deliver mental health related services to disaster victims consisted of the aborted Three Stage Plan. Other mental health related services that were provided were, in general, carried out by individuals rather than organizations. Various peripheral groups and organizations, such as social service, emergency and welfare organizations, delivered their own
services, but these groups did not provide mental health services in any systematic fashion. Therefore, it is not surprising that toward the end of April two new groups started to emerge to deliver mental health related services to disaster victims. These groups, which constituted the core of the emergent mental health system, will be discussed in the next section of the chapter.

Thus, our discussion now turns to a description and analysis of the emergent mental health system which eventually developed out of the early attempts and failures of the established mental health system to respond to the demands generated by the disaster.

The Characteristics of the Emergent Mental Health System

From the discussion so far, it is evident that during the immediate short-run emergency period the established mental health system did not respond to the disaster as an interdependent and coordinated entity. Instead the system's initial reaction was rather fragmented. Different components resumed operations at different points in Time Two. Some components made greater modifications in their structures and their domains than others, and various degrees of autonomy were manifested by various elements of the established system. This pattern of differential response by the system's components was furthermore continued in the long-run Time Two period. Out of this kind of response by the established mental health delivery system was spawned, as will now be shown, an emergent disaster-related mental health delivery system.

Our discussion in this section of the chapter will, therefore, include: 1) a brief introductory analysis of the nature of differential system responses under stress; 2) a description of the response patterns of those components of the established mental health system which did deliver disaster generated services in Time Two; 3) an examination of the development of new or emergent groups which provided mental health related services in connection with the disaster; 4) a discussion of how certain established organizations together with emergent groups constituted the creation of a new mental health delivery system; and 5) a highlighting of the characteristics; i.e., the components, domain, and boundaries, of the new Time Two emergent mental health delivery system and its relationship to peripheral groups and organizations in its external environment.
When a disaster hits any kind of social system, neither the system as a whole nor its components necessarily respond immediately (Dynes, 1974). This can be illustrated by looking at what happens to a community and its subsystems after a disaster. In a badly impacted area, while various community emergency organizations usually respond almost immediately, the organized elements of the leisure and recreational system, for example, do not function for days or even weeks into Time Two. Movie theaters and amusement places do not open; bars and bowling alleys remain closed; social clubs do not meet; and regular sessions of hobby groups are cancelled for a long time after the disaster has struck. Furthermore, even when community sectors or systems do respond, not all components necessarily respond at the same time or in the same way. For instance, there is considerable variation in when the undamaged commercial and business enterprises in a disaster-stricken locality reopen and how they go about providing services. On the one hand, banks typically move quickly to provide new services; whereas, large department stores, on the other hand, do not typically open their doors until they can reestablish the full range of their usual activities. Therefore, when disaster strikes there are differences not only in both the speed and nature of the response of different community systems, but also in the responses of different parts or components of the various community systems themselves.

As already described in the previous chapter, the established community mental health delivery system in the Xenia area did not respond as a whole in any major way for about five days after the tornado. Only one of the components or contract agencies, the Crisis Center, provided any immediate services. However, for the most part the services provided by this agency were quite different from the tasks or activities which traditionally fell within the organization's domain of operation.

Furthermore, as the ensuing discussion will demonstrate, when the established mental health system did finally respond in the later stages of Time Two, it did not react uniformly as a whole but, instead, responded in a fragmented way. In fact, most of the Time One system components never did provide any specifically disaster generated mental health related services in Time Two. Rather, the established system spawned new groups, not originally a part of the traditional system, to cope with the needs and demands which established organizations could not or were not willing to handle. These groups along with one of the established organizations or system components eventually came to form the core of the emergent mental health delivery system which developed in Time Two.
Typology of Component Responses

In a disaster, system components can and do respond in different ways even occasionally changing, altering or modifying their structures and/or domains in some way. There are four major possibilities or response patterns which can occur, and these are applicable not only to mental health organizations but to other types of organizations as well. First, organizations can temporarily suspend their operations and, upon resuming activities, be the same as they were before the suspension. Second, groups may maintain their old internal structures or social relationships but reappear with new domains. Third, other organizations do not change their domains but, instead, alter their structures or social relationships. Finally, previously non-existent social entities may come into being with new social relationships and new domains. Figure 3 indicates the logical possibilities when the two dimensions of social relationships and domains are cross-classified.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Old</th>
<th>New</th>
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<tr>
<td>Relationships</td>
<td>Type I</td>
<td>Type II</td>
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<td></td>
<td>(established)</td>
<td>(extending)</td>
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<tr>
<td>New</td>
<td>Type III</td>
<td>Type IV</td>
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<td></td>
<td>(expanding)</td>
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Figure 3: Four Types of Response

Type I (established). Type I organizations are those which exist prior to a disaster and which in Time Two continue to engage in regular tasks and to function within old domains. Certain kinds of emergency organizations such as police and fire departments are common examples of this first type. Although disasters may require an intensification of their behavioral efforts, these organizations are traditional agencies which, maintaining their old structures, continue to do their usual tasks, whether this is maintaining law and order (Kennedy, 1970) or fighting fires (Warheit, 1970). There is little if any change in the internal relationships or in the domains of these organizations from Time One to Time Two.
Type II (extending). Type II organizations are those which, while having a pre-disaster existence, extend their activities in Time Two into new domains. They maintain their old structures or social relationships, but get involved in doing new and unusual tasks, different from their ordinary everyday routines and which serve new categories of people previously unserviced by the organization. Building construction companies, for example, after a disaster may use their regular personnel and equipment to engage in community search and rescue activities as well as massive street and debris clearance work.

Type III (expanding). Type III organizations have regular domains, but not their Time One structures of social relationships. These organizations are referred to as expanding groups because, in most instances, such structural modifications are brought about by the expansion of personnel to meet the rise in organizational demands. This type of organizational response is often the result of community or organizational planning. That is, the core of the Type III organization exists prior to the disaster, but the overall Time Two expanded organization exists on paper. This would be illustrated by Red Cross volunteers running a shelter after a hurricane, but supervised by permanent Red Cross local chapter officials, as happened in Hurricane Betsy. During ordinary times, most Red Cross chapters have a very small staff and provide only limited services. However, following a major emergency, the disaster plan is activated and there is an expansion into a rather large-scale organization bearing little structural resemblance to the previous group, although perhaps providing the same general class of helping services as in Time One. The organization's ability to respond effectively is dependent upon defining and integrating the many tasks and activities of often a large number of volunteers. This requires that a new set of social relationships or organizational structure be developed. Such organizations which drastically alter their structures in Time Two are Type III organizations.

Type IV (emergent). Type IV groups are those which emerge in Time Two. They have no Time One existence; they do not exist even on paper or in latent form. Thus, both their structures and domains are new, with the tasks undertaken being different and not usual. Typical of Type IV groups in a disaster are the committees that come into being to coordinate the overall community response to the disaster, the handling of basic problems of immediate sheltering, evacuation or feeding, or long-run problems of housing, rebuilding and restoring community life (see Quarantelli, 1970b: 120). These, therefore, are groups which have both new structures and new domains.

What is important about this typology of organizational response to stress situations is that it contributes to our understanding of the organized delivery of mental health services following the Xenia disaster. In the Time Two period mental health related services
were clearly offered by three of these four major types of organizations. However, for the most part Type II and Type IV groups; i.e., organizations carving out new and different domains, delivered the majority of the mental health related services following the disaster. Most of the components of the established mental health system changed neither their structures nor their domains. By behaving largely as Type I organizations, these groups therefore provided very few specifically disaster-related services. On the other hand, the Crisis Center, at least at certain points in time, behaved as a Type II organization, functioning within its old structure but carving out a new domain. The two emergent groups, Interfaith and the Disaster Follow-Up Group, were Type IV organizations since they evolved both new structures and new domains. Only Type III organizations, which usually require prior planning, did not clearly appear in the Xenia situation; however, some of the peripheral social service and welfare agencies which provided mental health related services in Time Two behaved similar to Type III entities.

It is not our purpose to examine in great detail all the varied groups involved in mental health related activities from the second or third week after the impact until the time when most of the systematic field work for the study stopped. Instead, the objective of the ensuing discussion is to highlight the major activities of the components of the established system to show how these led to the development of a temporary new mental health delivery system geared to the tornado situation. To do this, our discussion will focus initially on those few organizations from the Time One mental health system which responded to the disaster and in what ways they provided, or at least made some effort to provide, disaster-related services. Then the new groups which emerged in Time Two to handle mental health related problems will be discussed. This will lead into an examination of how a combination of Type II organizations and Type IV groups loosely guided by the 648 staff coalesced into a new mental health delivery system providing services in Time Two, and the chapter concludes with a diagramatic outlining of the general characteristics of this emergent system.
The Response of the Established Mental Health System

The established mental health delivery system, as previously observed, ceased to function as a whole for about five days after the tornado. When activities were resumed, however, the system by and large maintained its Time One pattern of service delivery. As the nine service delivering components resumed activities at different points in time, only two of them, the Crisis Center and the Guidance Center, as well as the coordinating component, the 648 staff, engaged in much behavior that was different from their Time One patterns. Thus, apart from these few exceptions, the organizational structures and domains of most components of the established system remained essentially unchanged by the disaster.

In other words, by and large, most of the system's components neither offered nor were asked by the impacted population to provide disaster-related mental health services. For example, while some individual members of its staff provided limited volunteer assistance in the emergency period, the Yellow Springs Encounter continued its operations basically unchanged, treating only one disaster victim. The Yellow Springs Senior Citizens, the Aftercare Program, the Day Treatment Program, the Greene County Council for Retarded Children, and even the Emergency Psychiatric Services, all exhibited a similar response pattern: no disaster related changes in their organizational domains or structures. One system component, the United Health Foundation (UHF) Drug Education Program, simply ceased operations for about four months -- its two fulltime staff members acting as volunteers for the Crisis Center and thereby assisting in the various activities it carried out in Time Two. When this organization finally resumed activities five months after the tornado it was, in fact, merged with the Crisis Center, although this reorganization was the result of circumstances unrelated to the disaster. For all practical purposes, therefore, six of the nine components of the established mental health delivery system operated within the same organizational domains and structures in Time Two as they had in Time One. The two exceptions were the Guidance Center and the Crisis Center.

The Guidance Center

Before the tornado the services offered by the Guidance Center were organized for the most part around the medical model of mental health treatment. The agency's continued use of long-term psychotherapy, chemotherapy and psychiatric casework indicated this.
For some time prior to the tornado the Guidance Center had been assuming new functions such as providing aftercare and some limited consultation services and adapting new techniques such as group therapy and limited crisis intervention. However, by and large, the agency still remained at the time of the tornado primarily an outpatient treatment clinic specializing in individual therapy. As in the instance of most such outpatient treatment clinics established in the 1950's, the Guidance Center had found the shift to a community or human services orientation slow and difficult.

The various efforts of the Guidance Center to extend its domain in the immediate emergency period after the tornado have already been discussed. It was pointed out that despite the Center's attempts to adapt its services to the requirements of the situation, in the end, the agency actually provided few new services in relation to the disaster. The later Time Two behavior of the Guidance Center was marked by even fewer attempts at major innovations. As a matter of fact, it was not really until six weeks after the tornado that the Guidance Center was able to resume even a portion of its routine service delivery. Lacking adequate facilities for carrying on group and individual therapy in its temporary location, the agency, in the meantime, concentrated on contacting its existing and former clients, and on providing some walk-in services through the use of a half a dozen volunteers on loan to the agency by other organizations. It also offered some limited consultation and education services to the staff of various schools and day care centers. By July, three months after the tornado, the Guidance Center had located more permanent office space and was, therefore, able to return to full scale operations. Soon after that, one of the emergent groups, the Disaster Follow-Up Group, was transferred to the agency for its supervision. Other than this program, which for the most part functioned relatively autonomously, the Guidance Center instituted no new major services in response to the tornado.

The addition of personnel, in that it moved the Center toward becoming a Type III organization, did create some difficulties. Soon after the disaster, volunteers appeared from everywhere. There were, of course, problems adjusting to all this new and unexpected personnel. As one staff member noted, the organization had:

...a lot of volunteers from various local agencies, from Dayton and others in surrounding communities who wanted to help. But there was really nothing they could do. They had no more to offer than we did because they had never worked in disasters before. They didn't even know the local community so they could make good referrals.
However, apart from the internal organizational stress occasioned, did such an expansion make a difference in the services provided? While the general picture is clear, an exact answer is difficult to provide. This is because, even apart from unclear terminological classifications, the statistics obtained by DRC on the Guidance Center's operations from several sources were inconsistent and unreconcilable. However, two sets of figures on referrals and on new case openings do not suggest that the Center experienced any substantial increase in demands for services during even the first six months after the tornado.

Thus, it appears that the number of actual case openings in April 1974, the month of the tornado, represents an increase of, at most, 12 openings over those in March 1974. This increase is only two percent of the total case load for April 1974. Furthermore, of these new cases, nearly 60 percent were seen by the Center staff only once, a rough indicator of the moderate nature of most disorders treated. If this focus on the first month after the tornado seems to be too narrow a time focus, it can be noted that the longer-run trend in the case openings is not fundamentally different.

In comparing the organization's average monthly case load for the six months prior to the tornado with the average monthly case load for the six months following the disaster, there was, in fact an 8.5 percent decrease in clients subsequent to the disaster. Furthermore, in looking at the more long-run picture, the agency's monthly case load dropped by 35 percent in the following six months of October through March, as compared to the same six months in the year prior to the tornado. This is an interesting statistic since the Disaster Follow-Up outreach effort supervised by the agency was terminated after about seven months, although even this could not possibly account for such a dramatic drop.

It is perhaps significant to indicate the kinds of persons, reflected in these figures. The comment of one staff member describes those served, noting little overall change in this aspect of the Center's domain.

I really think we got involved in a very few, proportionately very few, specifically disaster-related cases. We dealt with those we had been dealing with before. We got those who had been in previous contact with us. But, as far as reaching out to new people, it seemed like we were not involved. Maybe I am a little disappointed, talk about expectations, that we didn't have an opportunity to serve some of the others that we had no contact with previously.
The referral figures are not inconsistent with the general pattern. Thus, while a total of 48 tornado-related referrals were made to the agency in April, this figure is actually 15 percent less than the total number of referrals made in the preceding month prior to the tornado. However, of these referrals, only 50 percent eventually became active cases, and these clients were rarely seen more than once or twice. In effect, this data reflects that the type of service delivered to most tornado victims was typically brief psychotherapy or crisis intervention, or the client was simply sent elsewhere. However, it also suggests that 50 percent of all referrals to this agency were somewhat inappropriate. That is, the service the client was seeking was not available from the Guidance Center; therefore, that agency's function during the first few weeks after the tornado was largely that of linking individuals with the appropriate source of help. Support for this latter statement can be found in the remarks of one staff member.

Thinking back, a lot of those cases referred to us by Red Cross and HUD really didn't need the kinds of services we had to offer at the Guidance Center. So, in a sense you could say they were inappropriate referrals. Sure we were glad to help them find agencies who could help with their problems. But most of the time it just wasn't our services they needed. They needed concrete help, not therapy. And we're set up here to do therapy.

Furthermore, looking at the situation in terms of the long run, the major sources of referrals in the six months after the tornado were not other mental health agencies, but rather disaster agencies concentrating on meeting physical needs. The Red Cross and HUD (Housing and Urban Development) together accounted for more than 30 percent of all referrals to the Guidance Center. The next highest agency, the Crisis Center, was responsible for only 14 percent of the total referrals made to the organization.

One other informative set of statistics shows that from January through May 1974 there were almost no case terminations at the Center. Yet in June of 1974, after the tornado, the organization terminated 152 cases, a figure representing almost 30 percent of the previous month's case load. According to a member of the Guidance Center's staff, the additional personnel obtained in April to assist in disaster efforts permitted the agency to close cases that they had wanted to terminate earlier. In other words, the organization could not make use of the additional personnel for disaster-related tasks; so, instead, they were utilized to carry out unfinished activities from Time One.
All these statistics must be seen against the fact that, once more permanent facilities had been located, the agency proceeded to write a letter to every person who had been identified by either the volunteers working in the shelters during the post-impact period or by other disaster relief agencies as possibly requiring the assistance of the Guidance Center. The purpose of this letter was to offer the services of the agency to these individuals; however, even this appears to have generated very little seeking of services by victims. As evidence of this, the Interfaith-DRC survey found that only two percent of the sample ever had any contact with the Guidance Center in the first six months after the tornado.

Thus, the overall response pattern of the Guidance Center can be summarized in the following way. In general terms, during the first few days after the disaster, the Guidance Center, through considering the possibility of generating new services geared specifically toward disaster victims, moved in the direction of becoming a Type II or extending organization. Then later, through the absorption of volunteers, the Center veered toward expanding into a Type III organization. However, on balance, the Guidance Center insofar as disaster-related matters were concerned, ultimately remained a Type I or established organization, maintaining both its basic Time One structure and its traditional domain or sphere of operation. The agency did differ from the other seven components of the established mental health system in that at least some thought was given to altering its domain, and some temporary shifts were made in its structure. Nevertheless, these changes were relatively minor and, as such, had only minimal consequences for the actual delivery of disaster-related services.

The Crisis Center

In contrast to the Guidance Center, the Crisis Center clearly did deliver new disaster-related services both immediately after the tornado and later in Time Two. Its focus on providing general information during the immediate post-impact period, while not strictly addressed to mental health difficulties, did involve attending to a wide range of problems in living experienced by the impacted population. Furthermore, the Crisis Center delivered these services to a population different from that which it usually served. This was largely because the radio had broadcast its phone number as one to call for general information within hours after the tornado impact. Thus, by adapting the services it provided and the types of client problems and population served, the Crisis Center in Time Two responded as a Type II organization; i.e., one which carved out a new domain in relation to the disaster.
After the emergency period, the agency continued to perform some of the same general tasks it had initiated literally within a few hours after the tornado struck. Continuing to act as a major source of information, the staff made contacts with the various local and extra-local disaster relief agencies so as to familiarize themselves with the services provided by these groups. After the immediate emergency period, much of the information requested from the agency concerned legal matters, such as insurance problems, borrowing of money, building and construction problems, etc. However, at the same time, requests were made for information pertaining to almost any conceivable type of human problem imaginable, in fact, far beyond the range of client problems typically served by the agency. Of course, some of the calls and other contacts did concern clearcut emotional problems. Yet very few of these were described by the staff as being of a serious nature, and they were typically handled through brief telephone counseling. However, for the most part calls related to emotional problems were less frequent than requests for services connected with physical and material needs. As indicated in the following remarks of a staff member, the agency continued to employ a myriad of strategies to facilitate resolutions to these problems, these ranging all the way from helping move a family to a new residence, to coaxing a reluctant woman to go to the hospital to receive treatment for physical injuries she received sifting through the remains of her destroyed home. Describing the agencies activities, the staff member noted:

We did everything, you know. I mean we were just open to doing whatever we felt there was a need to do, no matter what kind of need that might have been. It was a totally unique situation, and these were not routine kinds of things at all that we were doing to help people. So we did a lot of different things we never did before and probably won't again, unless, of course, another tornado happened.

However, this response pattern did not persist. This can be seen by examining the statistics of the services provided by the agency. The dramatic increase in demands for disaster related, but non-traditional services, peaked in April, the month of the tornado. In May, the total number of contacts made by the agency declined to 634 compared to the previous month's total of 4,446. However, while this is considerably less than the April figures, the total still represents an increase of about 50 percent over the average number of contacts per month for the six month period prior to the disaster; and approximately 28 percent of these calls in May were specifically disaster-related. Yet, in the month of June, the number of disaster-associated contacts dropped significantly, to less than ten percent of the total contacts that month. In July and August disaster calls made up less than five percent of the total requests for services.
In comparing the agency's average monthly workload for the six months prior to the tornado with the same figure for the six months after the tornado (i.e., excluding the month of April), there was approximately a 20 percent overall increase in the total number of calls received during the post-impact six month period. Further, this increase in demands for services was sustained throughout the remainder of the one year period following the disaster. Unfortunately it is difficult to determine whether or not this increase in contacts came about as a result of the tornado, since after August, the organization no longer differentiated disaster- and non-disaster-related contacts.

In comparing the nature of the calls or services requested for the pre- and post-impact period, there was only one significant change in the overall pattern of services delivered. That is, for the months of April, May, June, July, and August following the tornado, the requests for drug-related services dropped to about 1/2 their usual rate. It is important to stress, however, that even prior to the tornado, drug-related contacts made up on the average only about 12 percent of the agency's case load. During the six month period after the tornado, the number of drug-related contacts declined further, to an average of about six percent of the agency's total case load. However, after the initial six month period following the disaster, the demands for drug-related services gradually increased to their pre-tornado level of about 12 percent of the organization's total monthly case load.

The Crisis Center flared into prominence right after the tornado. The fact that it had working communications and was available on a 24-hour basis made it very salient as a provider of services. However, as demands for general information were increasingly met by other organizations in the longer-run Time Two period, the organization changed. As far as its ongoing operations were concerned, the agency reverted back to being a Type I established organization operating within its traditional domain.

Nevertheless, the Crisis Center staff did continue to be active in the delivery of disaster generated mental health services through acting as volunteers with the Disaster Follow-Up Group. At the director's suggestion, a large number of the Center's regular corps of trained volunteers participated as outreach workers for this emergent group. Furthermore, the Center's director with the help of the director of the UHF Drug Education Program actively assisted in the training and de-briefing of all of the outreach volunteers for the Disaster Follow-Up Group for a six month period. Thus, in this respect, the Crisis Center continued to be a part of the newly emergent mental health delivery system, albeit, as will be discussed later, in a different way from its involvement right after the disaster.
The Development of Emergent Groups

In Time Two there emerged two new groups. These groups were new both in their structural configurations and in their domains or spheres of operation. Both groups engaged in activities different from those carried out by the established mental health system, and they also concerned themselves with categories of disaster generated client problems which were not addressed by the established system. Therefore, these two emergent groups delivered services to a large number of disaster victims who, it seems reasonable to assume, would not otherwise have been reached by any component of the established mental health delivery system.

The Xenia Area Interfaith Council

A rather clearcut Type IV entity was formed about two weeks after the disaster. This group, hereafter referred to as Interfaith, arose out of informal interaction among the Xenia clergy and contact with the director of another similar ecumenical religious group which had come into being after the massive floods in Wilkes-Barre, Pennsylvania in 1972. The Wilkes-Barre entity, also studied by DRC (Ross and Smith, 1974) definitely provided the organizational model for the Xenia group. Nevertheless, despite the fact that a model was suggested to guide its operations, The Xenia Interfaith was a new group both in its structure and in the domain which it carved out for itself.

The emergence of Interfaith contrasts sharply with the coming into being of the Three Stage Plan. Apart from the temporary assistance of the Wilkes-Barre Interfaith director, the framework, structure and goals of the Xenia Interfaith emerged from within, rather than being imposed from outside the community. There was even initial agreement that the Dayton clergy were to be excluded from the workings of the group. The whole organization of Interfaith, including its decision making and lines of authority, were contained entirely within the Xenia area.

The survey was conducted primarily by college students, seminarians, housewives and a few mental health professionals. The volunteers were encouraged to visit at some length with victims allowing them not only "to express their needs," but also "to articulate their experience." Apart from telling the survey-takers to do this, and giving them information regarding the existing social and disaster relief agencies, little if any specific training was given to the
volunteers conducting the survey. Nevertheless, within two weeks, approximately 1,200 cards had been filled out and returned to the emergent Interfaith group.

When Interfaith was initially established, the primary services it sought to provide to victims were those involving direct material aid; i.e., money, clothing, housing, food, and the like, rather than disaster generated mental health services per se. However, relatively soon after the organization emerged, salary for one Interfaith staff member was supplied by the 648 Board. Yet this position was not actually funded for the provision of direct mental health services to disaster victims by Interfaith. Rather it was to ensure that the services delivered by Interfaith would be coordinated with those of the 648 mental health system. Thus, the staff member given this responsibility was designated as the Interfaith-648 liaison. At first, the liaison was charged with coordinating the activities of the volunteers working in the centers under the Three Stage Plan. When this effort failed, the liaison turned to coordinating those volunteers who were conducting the needs-assessment survey, since this project was to serve as a case-finding effort for mental health organizations, along with the various other social service and disaster relief organizations.

In the meantime, besides conducting the survey, Interfaith began working out of borrowed office facilities, supplying direct material and financial assistance to tornado victims. Soon after the disaster, a computerized skills bank of volunteer labor and other available services was compiled with the help of officials at Wright Patterson Air Force Base. In spite of the various types of assistance which were available for disaster victims, the results of the needs-assessment survey suggested that many people were either unaware of these services, or as yet had not sought them out. It was, therefore, decided that an outreach effort was needed in order to deliver the services to victims.

Although the objectives of the outreach program were quite broad, the services were viewed as meeting mental health related needs. Thus, in a formal document prepared by Interfaith, the purposes of the Interfaith outreach program were summarized as follows:

The tornado victims did not differentiate physical problems from emotional problems. Basic needs of food, clothing, and shelter took precedence over any feelings of grief, fear, panic or other anxieties. A more flexible and comprehensive community mental health model was needed - a model that would allow the mental health recovery worker to 1) locate the disaster victim and 2) support the victim in meeting all his needs, including any stemming from mental stress.
Thus, Interfaith initially anticipated using the survey results primarily to initiate an outreach program which they called "advocacy". The advocacy program consisted of follow-up contacts with all the families who had filled out need cards, making referrals to the appropriate disaster or other social service agency; and, where the victim family was ineligible for other types of assistance, the necessary funds or material assistance would be supplied directly by Interfaith. The total number of volunteers over the first six months of the advocacy program numbered approximately 175 persons of whom some 90 percent were individuals in occupations other than mental health. However, about one-fourth of the volunteers were clergy who had some informal experience in counseling. In general, recruitment of volunteers was not difficult, since most were drawn from the congregations of local churches.

The Interfaith survey produced an indicated need for some sort of possible mental health related services in about ten percent of the cases. However, instead of acting directly on this, Interfaith decided to transfer the relevant card to the other emergent group, Disaster Follow-Up. This division of responsibilities was not originally planned, but came about in the following way. The Guidance Center had, unknown to both the 648 staff and Interfaith, hired an individual to assess the community's mental health related needs after the tornado. The specifications of this job were vague, but it was thought that perhaps some kind of door-to-door survey using volunteers could be mounted. At any rate, at another of the innumerable meetings which went on, but one in which both the 648 staff and the Guidance Center were represented, it was discovered that unwittingly two persons had been hired to do roughly the same job. An informal division of labor emerged from this discovery. The Interfaith - 648 liaison staff member came to coordinate the needs-assessment survey. The other person became the coordinator of the effort to contact those victims whom the survey had indicated might require some sort of emotional support. This latter program became the province of the Disaster Follow-Up Group.

In the meantime, Interfaith gradually extended its advocacy services beyond the home-visitation program to include another strategy which the participants referred to as "institutional advocacy". The goal and method of institutional advocacy was described by Interfaith in the following way:

The Advocacy program will be expanded to take seriously its title of supporting the tornado victim and pleading and espousing his cause to the appropriate agency. The program will do in-depth research into the guidelines and eligibility rules of every private and governmental program for the purposes of interpretation and referral for the tornado victims.
The program will monitor, confront, and persuade any program, institution or governmental system that dominates the way of life of the Xenia citizenry. The advocates will take the hassles, frustrations and anxieties of the tornado victims upon themselves to either resolve the problem or confront the system. Interfaith has restructured its Community Services Department to be that department that enters into dialogue with other agencies and social groups to support and advocate community programs designed to meet community demands.

During the long-run Time Two period, Interfaith increasingly employed the method of institutional advocacy. Various state and federal disaster health and social service agencies were contacted, and their eligibility requirements and other policies were researched and frequently challenged by Interfaith. For example, victims whose applications for assistance had been turned down by the Ohio Disaster Aid Grant Program were encouraged to make appeals on these rejections. Eventually Interfaith was instrumental in getting 21 such appeals granted, with these people receiving a total of $45,000 of additional assistance as a result of the appeals. In short, Interfaith began to place a high priority on altering the social setting in which the "troubled" victim was involved. In carrying out this objective, the organization often operated with the fervor of a social movement engaged in changing certain aspects of the existing social order (Turner and Killian, 1972).

During the one year period following the tornado, Interfaith served over 3,000 persons with about 800 families receiving personal visits by the advocates. Furthermore, in addition to referrals, food, clothing, furniture, and other services supplied, cash grants totalling over $500,000 were made directly to disaster victims.

Throughout the first six months of its existence, Interfaith gradually established itself as a highly visible and relatively effective disaster relief agency. During that time, the organization was able to muster a total budget of about $750,000 through contributions from various church denominations, corporations, other groups and individuals. Furthermore, at the end of its first six months of operation, Interfaith experienced a continued demand for its services. Subsequently, the decision was made for the agency to continue to function as a more permanent and ongoing organization dedicated to delivering long-term recovery assistance to disaster victims.

Thus, Interfaith traversed a path from being an emergent group primarily focused on meeting victims' immediate material needs to becoming an institutionalized organization providing a broad range of disaster related services, many of these aimed at alleviating the
problems in living experienced by the Xenia population. The emergence of Interfaith exemplifies the coming into being of a Type IV group, since both its structure and its domain were developed in the course of its emergence.

The Disaster Follow-Up Group

Probably even more emergent than Interfaith, if that was possible, was the Disaster Follow-Up Group. This group was operational by the end of April. It developed seemingly out of two different sources: the Guidance Center and the 648 staff who, in turn, appear to have gotten the idea as a result of the urging of NIMH officials to develop such a program. As to the former, one Guidance Center staff member observed:

It first occurred to me that there needed to be a tracking system of tornado victims and that every victim should be contacted and their needs assessed. At that time, I had no idea that similar projects had occurred in other disasters, like Wilkes-Barre. It was just a common sense notion of doing that, and the idea that I had was maybe we would get lists from the Red Cross and from HUD about which houses were destroyed, and then start a tracking system just to find them, every single one, and assess their views and see how they were getting along with getting services.

When the group was formed, it was thought of as engaging in a "friendly neighbor" preventive mental health outreach program. A primary goal was to contact people in their homes, offer them emotional support, help them find and use existing social service and disaster relief agencies, and refer them to established mental health agencies when needed. By so doing, it was hoped that more serious mental health problems which might develop later could be prevented. Unlike Interfaith which focused on assisting victims with a wide range of problems in living, the Follow-Up Group was concerned mostly with locating and treating possible mental health problems.

For example, a philosophical goal of the Follow-Up Group as expressed by one of its staff members was "to foster a sense of community by citizens helping and cooperating with other citizens." Toward this end, therefore, two additional features of the program were established: meetings with small groupings of victims within a neighborhood whenever possible, and organizing neighborhood social affairs
by working with and through "natural" leaders. Thus, one of the major differences between the Disaster Follow-Up Group and Interfaith was in the type of assistance for victims which was promoted. On the one hand, Interfaith concentrated on actually changing certain stressful aspects of the victim's social environment in an effort to make the victim's situation more tolerable. It was hoped that this would lead to a reduction in the types of problems which usually come to the attention of mental health workers. On the other hand, the Follow-Up Group was organized as a vehicle for changing people, through facilitating their positive psychological adjustment to the events produced by the disaster. That is, its activities were geared to supplying the participants with a new frame of reference within which their existing misfortunes would become more tolerable. By providing an avenue through which victims could interact with one another to share their common feelings and experiences, it was hoped that social solidarity among the various participants could be increased and that this would serve a therapeutic function. Thus, unlike Interfaith which was dedicated to delivering concrete benefits, the Follow-Up Group was overwhelmingly geared to supplying victims with symbolic gratifications. This is partly documented by the fact that only about 10 percent of the contacts made were referred to traditional social service or health agencies.

The activities of the Disaster Follow-Up Group are perhaps best revealed by its caseload data. These figures reveal that out of the 748 contacts made by the agency, only about 50 percent were found to be experiencing some type of disaster-related problem. About half of these problems were classified as problems in living, including such things as the need for food, clothing, housing, and transportation, or problems in obtaining insurance claims, property repairs, medical care, legal advice, etc. The other half of the problems encountered were defined as emotional or mental health problems in the stricter sense of the term. However, the majority of these were described as involving anxiety about future storms. The relatively unserious nature of these problems is indicated by the fact that most of these latter difficulties were handled through one brief visit by the outreach team.

In most cases, even when some type of problem was encountered, the services offered by the Follow-Up Group consisted of a single informal visit by the outreach team. However, about 10 percent of the families contacted were provided over three visits. In these instances, some direct psychotherapy was conducted, this being carried out by one of the more highly trained professional volunteers. Furthermore, the group did provide some referral services, although out of the 748 contacts made, only about 20 percent, or 137 persons, were referred for any additional services. Of these 137 persons, about half were referred to traditional mental health agencies, mostly the Guidance Center; and the other half were sent to social service, health, or welfare organizations – in most instances, to Interfaith.
Thus, by and large, the Follow-Up Group provided direct services to those it contacted, these more often than not consisting of a "friendly visit" offering persons an opportunity to "air" their feelings and to obtain emotional support, advice, and reassurance from the volunteers.

Although about 64 persons volunteered at one time or another for the program, the total active membership at any given time seldom exceeded 20 persons. Visits by the volunteers were typically made in pairs and frequently lasted for two or more hours. Several of the volunteers had professional background training or experiences related to the activities they carried out in working with the Follow-Up Group. About one-fourth of the volunteers were rather highly trained mental health professionals, such as psychiatric social workers, psychologists, school counselors, etc. Another one-fourth were from peripheral mental health related professions like those discussed in Chapter III. These included persons from social service agencies, members of the clergy, Red Cross volunteers, nurses, and the trained Crisis Center volunteers who, although they worked with a formal mental health agency, could not be considered to be mental health professionals themselves. The remaining 50 percent of the volunteers were heterogeneous in their backgrounds, a large proportion of whom were housewives, but there were also a university professor, a retired real estate agent, and a retired department store manager included among the group.

At the beginning of the program about a dozen training sessions were held which the volunteers were encouraged, but not required, to attend. Two or three of these sessions, run by the staff of other Xenia mental health agencies, were thought to be adequate since the volunteers were not to take the role of mental health professionals but rather "friendly neighbors." The training sessions were followed by almost weekly "debriefing sessions" in which the volunteers were encouraged to express their own feelings. These debriefing sessions were based on the idea that not only disaster victims, but also caregivers, would require emotional support. The debriefing sessions and a number of special workshops, both offered primarily by the Crisis Center and UHF Drug Program staff, were also seen as providing a continuing source of training for the volunteers.

The role of "friendly neighbor" was not always seen as a legitimate one by all other parties interested in the delivery of mental health related services after the Xenia tornado. Criticisms came from both within the community mental health delivery system, such as the 648 Board, and from outside of it, such as the Montgomery County Mental Health Association and the State Department of Mental Health. Opinions were publicly and privately voiced that mental health services delivered by superficially trained personnel were not only useless, but dangerous. These criticisms contributed substantially to the uncertain, turbulent social environment in which the Follow-Up
Group had to operate. Since it also had some internal structural weaknesses, this emergent group suffered continuous and substantial stress.

From its inception the Follow-Up Group experienced perpetual uncertainty regarding the program's continuation. Its persistence was contingent on the approval of and funding from the 648 Board, both of which were granted on a month-to-month basis at first. Subsequently, the group found it extremely difficult to carve out its objectives, as well as to recruit and retain volunteers. In addition, the Follow-Up Group was frequently used as an instrument in the long-standing conflict between the 648 Board and the Guidance Center Board.

The program director had first been hired as a temporary staff member of the Guidance Center. However, the 648 staff, wanting to retain close supervision over the new disaster programs, soon demanded that the Follow-Up Group be placed under its control. Then two months later, the 648 Board directed that the Follow-Up Group be transferred back to the Guidance Center for its supervision so as not to have the 648 staff engaged in the delivery of direct mental health services. This final move generated considerable conflict between the Guidance Center and the 648 staff; and, in spite of the fact that the idea of a volunteer outreach program had been partly initiated by the Guidance Center, the agency was nevertheless reluctant to accept responsibility for it at that point in time. In effect, all of this led to relatively little supervision and direction being supplied to the program throughout its existence. Furthermore, the group felt little support from major components of the established mental health delivery system, a fact which led to feelings of marginality and uncertainty about the program's objectives on the part of the volunteers.

Thus, through almost the entire seven months of its duration, the Follow-Up Group led a rather marginal existence. However, considering its small size - two paid staff members and several dozen volunteers - its performance was not that marginal. The group made more than 748 visits to 538 families. From a comparative point of view, the Disaster Follow-Up Group survived as long as it did, despite all its difficulties, because it provided something for which there was a demand that other organizations did not or could not meet. The remarks of one of the volunteers perhaps reflect the extent to which this was the case:

In those cases where we found a person having a mental health problem all were seen as possible candidates for referrals to mental health agencies. But most did not avail themselves of this, but welcomed and used the volunteer contacts where they did not seem to want to contact one of the 648 agencies. These people were handled primarily by our
professionally trained volunteers, and all of these received considerable direct service or repeated visits.

However, despite the apparent contribution made by the Disaster Follow-Up Group, its activities were sometimes dismissed with remarks such as: "I really think that their job was complete by August. I think you just can't run around and visit people all the time. You've got to recognize a new set of problems."

The Emergence of a System

So far the disaster responses of the various Xenia area mental health groups have been described sequentially and separately, thus giving the appearance that the delivery of mental health related services in Time Two was carried out by separate organizations behaving in particular ways and relatively independently of one another. Certainly there was such fragmented organizational behavior in the post-impact period, particularly at first. Yet, in time, the disaster-related behavior of a number of these organizations did become inter-related. Together these units developed an identifiable area of operations, and acted, in some sense, as a bounded unit. In other words, this particular cluster of organizations constituted a system. However, the system which evolved to provide disaster generated services was an emergent mental health delivery system, one that was clearly distinguishable from the established mental health delivery system. An examination of how and why this new system came about is left to the next chapter. In this section, the discussion focuses on describing the characteristics of this new system, i.e., its components, domain, and boundaries.

The Characteristics of the Emergent Mental Health System

The core of the emergent system consisted of three interrelated components: the Crisis Center, Interfaith, and the Disaster Follow-Up Group. As a system, these components operated in a domain which reflected the goals and objectives of the community mental health ideology of service delivery. By carving out such a domain, the activities and interaction engaged in by the emergent system were therefore considerably different from those carried out by the established mental health system. Although the emergent system operated,
in some sense, as a bounded unit, because of its adherence to the community mental health ideology its boundaries were vague. Subsequently, the range of activities and interaction performed by the system were not always clearly delineated in relation to other care-giving systems or organizations in its environment. Yet, in one very important respect its tasks and role vis-a-vis other elements in its environment were overwhelmingly clear: the new system positioned itself as the nucleus of disaster related service delivery.

**System Components.** The three major components of the emergent mental health delivery system were the Crisis Center, Interfaith, and the Disaster Follow-Up Group. Since the organizational characteristics of each of these components have already been described in considerable detail, they need not be elaborated again. However, one Time Two characteristic common to each of these groups, but not exhibited by the components of the established mental health system, merits re-statement. All three of these groups which ultimately formed the core of the emergent mental health system responded to the disaster by carving out new and different organizational domains. In other words, in Time Two, each evolved new services specifically geared toward meeting disaster generated problems among the impacted population. Although the domains established by all three components were strikingly similar, by contrast, taken as a whole, the domain of the new system was quite distinctive from that of the established mental health system.

**System Domain.** The emergent mental health system clearly reflected the community mental health ideology of service delivery. Therefore, the domain of the system; i.e., the goals and objectives which it evolved, the nature of the services it delivered, and the types of client problems and population it served, followed from this basic overall approach to mental health care. This is pointed out by the remarks of one of the volunteers of the Disaster Follow-Up Group who, when asked to delineate the objectives of the program, stated the following:

> As far as I'm concerned, what the volunteers are doing is community mental health. That is an approach that most of the 648 agencies don't really seem to subscribe to. What the volunteers are doing is reaching out to the people, instead of sitting behind desks in offices and waiting for the people to come to them. It's a preventive kind of thing. You know, just giving immediate support and just being someone they can talk to. In this way, the volunteers can let people know that their reactions to the tornado and feelings about what happened are normal. It seems kind of funny that 648 seems to sort of dismiss what we're doing as not really
being a mental health service. I guess it's not the concept of mental health they have. But I have no difficulty in seeing what we're doing as being community mental health in the real sense. Actually it boggles my mind everytime I think of it, because it just makes a lot of sense to do what we're doing, just going out and visiting people. Yet, it fits with the idea of community mental health.

Similarly, Interfaith in one of its official documents described its advocacy services as "a more flexible comprehensive community mental health model...that would support the victim in meeting all his needs, including any stemming from mental stress." One of the Crisis Center staff went even further in his remarks, stating that:

We just saw ourselves as providing any kind of human service that victims seemed to need. But really not that much mental health types of services, if by that you mean strict one-to-one counseling.

In fact, this last statement rather succinctly summarizes the very approach which volunteers of the Disaster Follow-Up Group were urged to take by the Crisis Center staff in the training sessions they conducted for the group.

The fact that the emergent mental health system evolved around a community mental health model of service delivery meant that its domain was quite distinctive when compared with the domain of the established mental health system. The contrast can be seen in terms of several key dimensions which, as pointed out in Chapter III, distinguish the community approach from more traditional approaches to mental health care.

In the first place, the strategies employed by the emergent mental health delivery system involved actively seeking out clients and serving them in community settings, rather than passively waiting for the clients to request help in more clinical settings. As noted earlier, the two major system components, Interfaith and the Disaster Follow-Up Group, almost exclusively employed an outreach intervention approach. Thus, most of their services were provided in people's homes, in churches, on the streets, in bars, over the telephone, or wherever the outreach workers could find people who needed help. Even the telephone hot-line format of the Crisis Center, while obviously not as aggressive in this regard as the door-to-door outreach method, did allow users to receive help in natural settings.

A primary objective of the emergent mental health delivery system was prevention, rather than treatment. Procedures were therefore used which would reach as many people as possible, victims and
non-victims, in an effort both to eradicate immediate symptoms and to increase people's resistance to more serious long-run difficulties. For example, the initial Interfaith needs-assessment survey was one method used to achieve this objective. In the words of a staff member of the agency, it "...provided a preventive mental health articulation of personalized experience...". Furthermore, this was, by and large, the same method employed by most of the home visits made by the Follow-Up Group.

Consistent with the emphasis on prevention, the emergent system took the total population as potential users of its services, rather than delimited segments exhibiting particular kinds of disturbances or problems. Thus, the Disaster Follow-Up Group did not simply offer its services to direct disaster victims nor simply those persons referred to it by other groups. Rather, it also launched a door-to-door visitation effort even in some neighborhoods left undamaged by the tornado, as well as in areas where a number of victims had been relocated. Even more important, the types of client problems treated by all three components were not limited and specific, like those which concerned the established mental health agencies, but they included almost any conceivable human need.

Thus, the emergent mental health delivery system generally provided a wide range of active intervention and human service strategies and techniques, rather than more passive and clinically-based treatment methods. For example, the technique most often used by the Follow-Up Group involved giving immediate and brief emotional support or informal "counseling". The Crisis Center, of course, carried out its usual crisis intervention techniques which included not only brief therapy, but also making referrals for other appropriate services which would facilitate resolutions to a client's problems. The wide spectrum of approaches employed by Interfaith spanned from offering direct financial and material assistance, to negotiating with HUD to change a particular policy deemed unjust to disaster victims, to providing informal counseling and emotional support. Thus, in contrast to the established system the technologies utilized by the emergent mental health system were not limited to the providing of therapy or even any other more specific or limited techniques of mental health care. Instead, the new system did everything including act as expediters, facilitators, helpers, ombudsmen, friendly neighbors, and only occasionally as therapists.

Consequently, rather than viewing the appropriate sources of manpower as limited to the traditional mental health professions, the emergent system relied on the use of "para-professionals" or "indigenous" mental health workers. Over half of the volunteers of the Disaster Follow-Up Group and 90 percent of Interfaith's advocates could be so categorized. Similarly, none of the fulltime Crisis Center staff held degrees in the traditional mental health fields.
Furthermore, the emergent system sought to implement the concept of community control in carving out its domain. Rather than relying on mental health professionals as the sole source of data as to the mental health related needs of the community following the disaster, the system turned to members of the community itself to identify their own mental health related difficulties. Thus, the Interfaith needs-assessment survey was conducted prior to the designing of programs to meet the needs of disaster victims.

A final domain relevant characteristic of the emergent mental health system was its focus on identifying sources of stress within the environment or the community itself, rather than assuming that the sources of all disturbed behaviors were located inside the individual. Although this strategy was most consistently employed by Interfaith through its "institutional advocacy" program, one other system component, the Crisis Center, provided considerable referrals for legal advice.

To summarize, the domain of the emergent mental health system reflected the objectives of the community orientation to mental health care. Consequently, the services it evolved, and the types of client problems and population it served did not by and large overlap with the domain of the established mental health delivery system. Rather, as is often the case with the development of emergent social behavior, the new system evolved to fill certain gaps in services which the established system not only had been unable to provide in the early stages of Time Two, but which it neither had offered even prior to the disaster in Time One.

System Boundaries. The concept of boundaries implies that there were both a greater connectedness in activities and more frequent interaction between the component groups within the boundaries of the emergent system, than between these system components and other groups and organizations outside the boundaries of the system. How then were these boundaries established and maintained? In specific terms, the linkages between the three major components of the emergent mental health system were evidenced in the frequencies and kinds of interaction which occurred, the division of labor which developed, and the major sources from which the components recruited their personnel. In fact, by examining these linkages it will be evident that there were by far greater ties between the constellation of components comprising the emergent system than between them and other elements in the established mental health system. Yet, at the same time, while the emergent system did establish some sort of boundaries around its activities, these were vague and permeable. However, as will be noted here and discussed further in the next section of the chapter, these boundaries were looser in relation to peripheral mental health groups and organizations than they were in relation to the established and formal mental health delivery system.
An examination of the referral or "people channeling" patterns among the components of the emergent mental health system demonstrates one way in which the components interacted with one another, thereby linking their activities. For example, about one-third of all the referrals made by the Disaster Follow-Up Group were sent to the two other components of the emergent system; i.e., Interfaith and the Crisis Center. Looking at the referrals made by Interfaith, the Follow-Up Group reported that about 70 percent of those persons actually referred to the group for its services were sent by Interfaith. In addition, Interfaith supplied the names of about 75 percent of the displaced families which were visited by the group. Neither Interfaith nor the Crisis Center maintained systematic records of their specific referral patterns. However, the Crisis Center staff impressionistically stated that well over a majority of its referrals for disaster specific services were made to Interfaith. Furthermore, Interfaith reported that, although only about 15 percent of its total clientele were referred for specifically mental health related services, the majority of these were channeled to the Follow-Up Group.

In contrast, an examination of the referral pattern between the emergent system and the established mental health system reveals a rather different picture. While Interfaith reported sending only a handful of its clients to established 648 agencies, the figures compiled by the Follow-Up Group indicated that it sent less than 10 percent of its total clients to established mental health agencies. Looking at the referrals made by the established 648 service network to components of the emergent system, it is discovered that the components of the established system sent so few clients to the Follow-Up Group as to be almost insignificant. Undoubtedly more persons were channeled to Interfaith by established 648 agencies, primarily because of the broad nature of its services. Yet, Interfaith staff members did not recall that the numbers were too great. Thus, relatively speaking, as far as referral patterns were concerned, the activities of the components of the emergent system were certainly more closely linked and connected to one another than to those of the established mental health agencies.

These referral patterns between the components of the emergent system were facilitated by an informal relationship between Interfaith and the Disaster Follow-Up Group which further served to link their activities. This was the understanding, noted earlier, that while Interfaith would conduct the needs-assessment survey to locate persons experiencing disaster-related problems, those requiring more specific emotional or mental health support would be channeled to the Follow-Up Group. In fact, it is from this relationship with Interfaith that the Disaster Follow-Up Group acquired its name. This linkage between the two emergent groups was supported by the 648 staff and Board which provided a portion of the funding necessary for the arrangement. Thus, the emergent system evolved a division of labor which, as sociologists
pointed out a long time ago, binds as well as divides. In time, this division of responsibilities led to considerable interaction between the two emergent groups. As a matter of fact, when the Follow-Up Group was eventually phased out, those clients believed to require further assistance were sent to Interfaith.

Another factor which affected the relationships between the components of the new mental health system was the source of the various personnel or volunteers recruited by the emergent groups. The Disaster Follow-Up Group obtained a number of its volunteers from persons associated with the Crisis Center, and a majority of these as well as others of its volunteers normally worked for peripheral groups and organizations. Also, the other emergent group, Interfaith, depended upon such peripheral groups for a number of its volunteers. In short, this meant that there was some overlapping group membership among the three major components of the emergent system, a factor which facilitated communication and other forms of interaction between them.

Thus far, it has been suggested that there were considerably greater ties between the activities of emergent system components than between these components and other elements of the established system. This was, in fact, the case. Besides those already discussed, a number of other factors demonstrate the extent to which the emergent system functioned as a separate entity engaging in distinct activities apart from the established system.

First, there was very little overlap in the services provided by the two systems, each tending to operate in different spheres and offering different types of services to distinctively different client populations. Second, the element common to both systems, the 648 staff and Board, exercised only nominal authority over the emergent system components. At the same time, however, the 648 staff and Board moves to exercise even greater authority over the established system components than it had even in Time One.

In fact, the 648 staff and Board themselves largely viewed the emergent groups and even the Crisis Center\(^11\) as functioning as a separate cluster or entity in the delivery of disaster-related mental health services. As the Time Two period lengthened, the 648 staff, in particular, increasingly felt that if any groups were to become involved in disaster generated mental health services, it was the responsibility of the two emergent groups. To be sure, there had been the very early aborted effort to involve the Guidance Center in the Three Stage Plan. But that failure seemed to convince the 648 staff that no further responsibility for disaster generated mental health services should be given to any of the established agencies. Thus, the established mental health delivery system began to assume a posture of benign neglect, with the provision of disaster-related services segregated out of the established system and left to the
province of the components of the emergent mental health delivery system. In the meantime, the established mental health organizations assigned the highest priority to serving their previous clients. In fact, there was a general reluctance to set aside the providing of usual services to regular users in order to substitute emergency activities for disaster victims as such. As one mental health professional said, "I couldn't take on any additional cases after the tornado, so I personally did not see even any of these new people who were referred to us. But I did try to keep up with my original caseload."

If anything, the demarcation line between the two systems was drawn even more sharply as time went on. Thus, the 648 staff and Board made plans to utilize additional state disaster funds for the early implementation of two previously planned new components of the established service network, the children's mental health program and the emergency support services. At the same time, the decision was made to terminate funding for the two emergent groups at the end of October, six months after the disaster. The Crisis Center itself was to be phased out. It was anticipated that the established mental health system's capability to handle any longer run mental health problems stemming from the disaster would be adequate. This decision to abandon the outreach programs and the relative lack of attention and supervision supplied to the two emergent groups, and especially the more strictly mental health oriented Follow-Up Group, led various contract agencies to surmise that the 648 Board and staff had virtually "washed its hands of the disaster." This attitude is conveyed in the following remarks of a staff member of one contract agency:

The decision was handed down that these programs would end in October, even before the anniversary date. I guess what the 648 staff has done is to declare the disaster over by terminating the outreach program. I think they just want to stay out of the whole thing at this point.

One final indication of the sharp divisions between the emergent mental health system and the established 648 system is in the verbal attacks to which all three components of the disaster generated system were subjected, sometimes privately and sometimes more publicly. For example, as one member of a local agency said:

There was one time when I felt that there was more than a little animosity from the mental health people toward Interfaith. Some felt that they were the children of God, and they could better answer the needs with God's help than we could. And I felt that they wanted to do everything, that they didn't really want to refer to us, and they wanted to take over. Really the efforts were
a duplication of services as far as mental health is concerned. So there was some conflict between them and the mental health agencies.

Furthermore, some of the criticisms implying that the emergent components were not engaging in truly mental health activities have already been noted. In fact, not only were the two new emergent groups questioned in this regard, but the activities of the Crisis Center were also the subject of criticisms by the 648 staff. The following observations of one 648 Board member in relation to the emergent groups therefore reflects the views of many other persons in the established mental health system:

I mean as far as what they had hoped to accomplish and the whole problem in all of this is that it is impossible to evaluate what they did because no one had really any solid objective. Everyone was doing to go out and do the job. But what job were they going to do? Well, nobody really knew what anybody was going to do, but they were going to do the job.

Thus, as implied in the quotation, a division of "they" versus "we" slowly developed through time as the boundaries between the emergent and established mental health systems became sharper and more clearly delineated. However, as will be pointed out in the next section, the boundaries of the new system were by no means as clearcut in relation to peripheral mental health groups and organizations in its environment. In fact, as far as this sector of the system's environments was concerned, the boundaries of the emergent system were far more vague and permeable. There was considerable overlapping in domains as well as the formation of more network linkages between the peripheral groups and the focal system.

Peripheral Groups and Organizations

Groups and organizations peripheral to the established mental health delivery system also offered some assistance to disaster victims which was not distinguishable from what the emergent system attempted and provided in Time Two. As noted in Chapter III, such kinds of groups delivered an indeterminate amount of mental health services in Time One; they did the same in Time Two for disaster generated mental health related services. However, just as these groups were peripheral to the established mental health system in Time One, they were also not a part of the emergent mental health delivery system but rather a part of its external environment. Even so, there was
a greater blurring and interpenetration of the boundaries between peripheral groups and organizations and the emergent mental health system than there was between the boundaries of the established mental health system and the emergent system. In fact, many of the activities carried out by the new system overlapped with those engaged in by this portion of its environment. A brief examination of the disaster response of some of these other groups and organizations will serve to illustrate this.

Some existing social service agencies continued to carry out their usual tasks in Time Two. Thus, for example, Family Services responded by providing tornado victims with individual and family therapy and also continued to provide its traditional services to its usual clients. The Bureau of Vocational Rehabilitation, the Community Action Council, Planned Parenthood, the County Health Department, and the County Welfare Department also continued offering their everyday services. In essence, these organizations while remaining Type I organizations, provided their traditional range of services which, although they were designed primarily around other goals, were nevertheless relevant to mental health care in the broadest sense of the term. Typical of what these groups did in Time Two are the kinds of activities enumerated below by a staff member of one of the agencies:

Sometimes maybe giving them a stove, or giving them a week's worth of food was the best way to handle the emotional problems. Sometimes being overwhelmed by a financial or material problem puts you over your limit and things get blown out of proportion. Where am I going to get food, or how am I going to take care of this or that? And maybe the person is pretty stable ordinarily, and a lot of times if you go in to meet the material assistance kind of problem or the informational kinds of problems, you solve what's bothering them. If you go in with the attitude that everybody needs counseling or everybody has a defect in decision making or coping, I think it will take too long to get at what they really need. Sometimes a person is really upset, but maybe it's because they're concerned about where the food's going to come from, not whether they have a weak ego or something like that. So you really have a situation that can be handled differently. So perhaps it's a combination of counseling and meeting the other needs.

Other existing agencies in the Xenia area either changed their domains by extending their spheres of operation, becoming Type II organizations; or expanded their structures to cope with an expected increase in demands for services, becoming Type III organizations.
Examples of the former were Metropolitan Churches United in Dayton, Welfare Rights, Easter Seals, and Golden Age Senior Citizens of Xenia. An illustration of the latter, although from outside of the local community, was Catholic Social Services. This organization, which had been located in Dayton for more than 50 years, established a new office in Xenia and broadened its activities to include outreach services, a pattern of service delivery characteristic of the emergent groups already discussed. While these peripheral groups and organizations did undoubtedly assist a number of disaster victims, it is perhaps important to note that the Interfaith-DRC survey found that only two or three percent of all households sampled had contact with each of the above organizations, with the exception of the Welfare Department which served a much larger percentage of people.

Of course the traditional emergency relief agencies, the Red Cross, the Salvation Army and the Mennonite Disaster Service, performed their usual disaster tasks. Since these organizations focus on providing material and physical assistance to victims in order to alleviate their emergency needs, the main thrust of their efforts was not directed specifically toward providing mental health intervention. However, some of their activities might be viewed as therapeutic, or at least as preventive mental health efforts, similar to those provided by the two emergent outreach groups. This is the case because not only do personnel in these organizations frequently provide services which in the broad sense may be construed as counseling in the context of performing their disaster relief efforts, but in this particular disaster the Red Cross was one of the highest sources of referrals for the Guidance Center in the weeks following the tornado. In fact, the Interfaith-DRC survey showed that an astounding 34 percent of all households in Xenia received some assistance from the Red Cross.

In the main, the indicated activities of these peripheral groups and organizations were not coordinated, if they were at all even noticed, with those of the established mental health delivery system in Time Two. By contrast, there was some coordination between the activities of these various groups and organizations and those of the emergent mental health delivery system. For a period of time the Greene County Health and Welfare Planning Council sponsored weekly, then bi-weekly, and later monthly meetings among all the health, welfare, social service and disaster relief agencies in an effort to link their services in relation to the disaster. These meetings not only set the stage for interaction between the indicated groups, but on occasion, they also facilitated the resolution of domain conflicts.

For example, at one point it was discovered that seven different organizations were conducting some kind of door-to-door outreach program, including the two emergent groups. Consequently, the participants at the meetings helped each of these groups to carve out specific domains and boundaries for these activities. Since the
Health and Welfare Planning Council, a United Fund agency, supplied some limited funding for all three components of the emergent mental health system, these groups attended the interagency meetings regularly. Often potential conflicts regarding overlapping domains between the two emergent groups were averted through the agreements reached at these meetings.

Further indication of the emergent mental health system's linkages with various peripheral groups and organizations is the fact that Interfaith stated that, by far, the majority of referrals it made were to such groups and organizations. Also about one-third of those referred for additional services by the Disaster Follow-Up Group were channeled to such groups. In addition, Interfaith, through its institutional advocacy program, frequently collaborated with some of these organizations, most notably with HUD, the County Health Department, and the County Welfare Department, to establish special programs to aid disaster victims. Thus, in short, the emergent mental health system unlike the established system, sought and was often successful in forming a network of liaisons with other community care-giving organizations in its larger environment. It should be noted that the emergent groups were in fact encouraged by the 648 staff to carve out these interdependencies with other groups and organizations. However, apart from its initial short-run attempts to include such groups and organizations in the various large-scale planning meetings, the established mental health system, by contrast, had few disaster-related contacts with these peripheral groups and organizations in the longer-run Time Two period.

The Time Two Emergent System

To conclude, what kind of mental health delivery system eventually emerged to meet the disaster generated mental health problems which existed in Xenia after the tornado? The system was comprised of three core components, Interfaith, the Disaster Follow-Up Group, and the previously existing Crisis Center, although this organization functioned in different ways at different times. In delivering services to disaster victims, the new system operated within a domain conception consistent with the community mental health ideology of service delivery. Therefore, since the established system adhered to a more traditional model of mental health care, there was little overlap between the domain of the emergent mental health delivery system and the domain of the established system. Both offered different services, geared toward different client problems and target populations. Furthermore, the new system operated at least in relation to the established system, as a bounded unit. However, there was considerable
overlapping and intermeshing of the new mental health system's activities with those which fell under the domain of what have been termed peripheral groups and organizations.

As a system, the newly emergent constellation of groups delivering disaster generated services was relatively well integrated. This interdependency was not, however, a consequence of authority exercised over the network by the 648 staff and Board. Rather, it was a consequence of coordinating mechanisms developed by the emergent system itself, more specifically the referral patterns established, the division of labor which evolved, and the overlapping group membership between system components. Consequently, the boundaries between the established mental health system and the emergent system were sharply specified in terms of the kinds of interaction exhibited between the two, as well as in the types of activities undertaken. As far as the 648 staff and Board were concerned, the delivery of disaster-generated services in the long-run Time Two period was the primary responsibility of the components of the new system. Thus, outside the Guidance Center and the 648 staff, which were only marginally involved with the activities of emergent system components in the delivery of disaster-related services, the emergent mental health system functioned largely as a separate entity with few ties to the established mental health system.

However, because of the nature of the domain which the emergent system carved out for itself its boundaries were never firm in relation to the boundaries of peripheral groups and organizations in the larger community care-giving network. Yet, to the extent that the problems experienced by disaster victims were multiple and varied, the approaches to their solutions required interpenetration of traditional system and organizational boundaries.

To make clearer what has been described in this chapter, the delivery of mental health services in the Xenia area in Time Two can be graphically depicted as in Figure 4. The diagram includes not only the emergent mental health delivery system, but also depicts its relationships to the established mental health system and peripheral groups and organizations.

If these were the characteristics of the system delivering mental health related services in connection with the disaster, how can its emergence be accounted for or explained? Why did the delivery of mental health services take this particular form, and why did the emergent system manifest these particular features rather than others which were potentially possible? The next chapter addresses these and related questions by turning to an analysis of the various factors or conditions which were operative in the situation.
Figure 4: The Emergent Mental Health System and Its Relationship to the Established Mental Health System and Peripheral Elements
Footnotes

1. It should be stressed that the term "mental health services" is being used to refer to a plethora of activities concerned with alleviating a wide range of emotional, behavioral and social disorders. These include everything from more serious mental disorders or mental illness, to less serious difficulties or mental health problems, to even more generic human problems or problems in living. In fact, the conceptual difficulties involved in the use of the term "mental health services" are indicative of the nature of the empirical phenomena itself. In effect, standards as to what constitutes mental health treatment or care in modern society are not fixed, but are ambiguous and provisional. Thus, what actually constitutes mental health care is intimately related to current standards of well-being and social effectiveness (Parloff, 1976).

2. There were, for example, varying views as to what topics were simply discussed as compared to the particular courses of actions which were advocated and what, if any, decisions were made. There were even different versions of who, if anyone, chaired the meeting. It is clear that many of the participants, unknown to one another, left the meeting with somewhat different versions of what had transpired and what was going to ensue as a result of the interaction which had occurred. Nevertheless, certain aspects of the meeting can be ascertained.

3. Some did report that the Guidance Center was to prepare a spot announcement to be broadcast by local radio stations. This was intended to alert the population as to the possible and expected psychological and emotional reactions to disasters, as well as to inform people of the availability of services at the Guidance Center.

4. Actually through the Red Cross, mental health officials learned that the setting up of any type of services in the one-stop center had to be cleared with officials from the Federal Disaster Administrative Agency (FDAA). By law, the regional FDAA officer is responsible for supervising and coordinating the federal one-stop disaster assistance centers.

5. It was reported that as many as 300 volunteers from various mental health centers, colleges, and seminaries in neighboring areas offered their services to the programs at the disaster shelters. However, a DRC survey indicates that the number of actual
volunteers was less than a third of that number, perhaps 70 or 80 persons. The involvement was overwhelmingly from outside of the city of Xenia.

6. The emergence and activities of this group are discussed in the latter half of this chapter.

7. There was still another problem. All of the various outside officials and information seekers, who were still converging on the agency even two weeks after the impact, had to be hosted by the 648 staff.

8. Although fairly systematic data were obtained for about a year after the tornado, and more selective data were gathered for about an 18 month period, when the term "Time Two" is used reference is being made roughly to the first six months after the disaster.

9. They, of course, offered their traditional services to their usual clients. Both, as far as it was able to be determined, had little, if any, direct connection with the disaster. In principle, the services offered by these organizations to their usual clients could have been disaster related. However, in actual fact, the agencies reported that they were not.

10. For a discussion and analysis of the later stages of development of Interfaith, see Ross, forthcoming.

11. In fact, from the very beginning of the Time Two period, the Crisis Center was excluded from the overall planning of the disaster response. According to the staff, no representative of either the Crisis Center or the UHF Program was ever invited to any of the numerous meetings held at the start of Time Two. The agency surmised that this was because its own activities immediately after the disaster were so radically different from those organized under the Three Stage Plan that the 648 staff saw no suitable role which it could play in the plans that were developing.

12. Under the developing community mental health plan, two entirely new agencies were envisioned: one a children's mental health program, and the other an emergency support services agency. Although the 648 staff and Board, acting on the advice of state mental health representatives, chose to accept additional state funding to launch these agencies early, they did not, however, become operational until around nine months after the disaster.
Furthermore, by that time, the 648 Board had decided to replace the Crisis Center with the emergency support service, a decision which provoked bitter community-wide conflict over the new plan for several months thereafter.
CHAPTER V

CONDITIONS AFFECTING THE EMERGENT RESPONSE

This chapter sets forth an explanation for the emergence of the new disaster-related mental health delivery system. By way of introduction, the conditions used to advance an explanation for the response failure of the established system and for the emergence of a new mental health delivery system are examined. The discussion then turns to the more substantive findings in relation to the way in which these conditions were operative in the situation. This will include a discussion of 1) the effects of external socio-cultural factors on the demands to which the established mental health delivery system was subjected after the tornado; 2) the internal socio-cultural factors affecting the capabilities of the established system to adjust to the post-disaster situation; and 3) how the feedback from the interplay of internal and external factors resulted in the development of a particular kind of emergent mental health delivery system in Time Two.

The Conditions

An analysis of the conditions for any social phenomena rests on two questions: 1) What is it which is being explained? and 2) What other prior phenomena is the explanation? The first, in technical terms, is the explanada and the second is the explanatia (Wallace, 1969: 3). The fundamental requirement of explanation is to show a link between the explanada and the explanatia, or between two sets of behavioral phenomena.

The Explanada

What has to be explained is threefold. First, why was it that the established mental health delivery system in the Xenia area did not, for the most part, provide disaster generated mental health related services after the tornado? Second, why did another mental health delivery system emerge to deliver such services? And, third, what accounts for the particular features or characteristics which
the emergent mental health delivery system developed? These three observable kinds of phenomena constitute the explananda, or that which is to be explained by the study.

The Explanatia

A search for the "causes" of any social phenomena is an exercise in mysticism and fails to recognize that "causality is a property of theoretical systems rather than of the world" (Mullins, 1974: 4). Nevertheless, it is not amiss to attempt to seek out those prior sets of conditions which are associated or correlated with some later kind of social behavior, as long as it is recognized that the order which is found in any social phenomena is ultimately imposed on it by the conceptual apparatus through which it is viewed. As was discussed in Chapter II, the phenomena to be accounted for by this study were approached from a conceptual vantage point drawn from two general theoretical perspectives - the collective behavior perspective and the general systems perspective. Therefore, the concepts used in the analysis thus far and the set of conditions which will be shown to account for the phenomena were derived from this overall composite orientation or conceptual framework. Before delineating these conditions, it is instructive to re-state the relationships between the central concepts of our analysis in summary form.

It has already been demonstrated that the Time One or established mental health delivery system in Xenia had evolved, because of particular socio-cultural contexts, a constellation of capabilities to meet a range of demands. Stated differently, prior to the tornado, the system had developed a relatively balanced demand-capability ratio which allowed it to function on an everyday basis. However, when the disaster struck, the system did not respond in any meaningful way to provide services to victims. This suggests that the demand-capability ratio of the system was disturbed. But what produced the disturbance? It resulted from changes or alterations in the socio-cultural contexts or conditions affecting the ratio and, therefore, ultimately the behavior of the system. In other words, as the conditions affecting the demand-capability ratio were altered, the established system was affected, in this particular case making the provision of disaster generated mental health services by that system virtually impossible. Furthermore, some of the changed socio-cultural conditions were such as to create a demand-capability ratio which led not only to the emergence of a new system, but to one with a particular set of characteristics. What then were the nature of these socio-cultural conditions affecting the behavior of the system in relation to the disaster?
Socio-cultural conditions can be analyzed in a variety of ways (Brouillette and Quarantelli, 1971). Among the distinctions which can be made are whether the conditions or factors are carry-overs from Time One or develop only in Time Two. There is perhaps a tendency to overestimate the importance of the latter and to underrate the influence of the former in disaster situations. Thus, it sometimes appears as if responses in Time Two are almost solely the result of factors which become operative as a direct result of the disaster event. In fact, as stated in Chapter II, a strict general systems analysis of the phenomena at hand, since the approach tends to be more decidedly ahistorical, would tend to focus predominantly on the immediate or Time Two determinants of system behavior. However, such a view is deceptively simple and altogether incomplete as an explanation. Much of what goes on after a disaster occurs in the context of the pre-disaster situation or the preconditions in the situation. Of course, this does not mean that only those social factors which exist before a disaster are important, but it does suggest - and there is substantial research to support this - that there is considerable continuity as well as discontinuity between Time One and Time Two.1

As noted in Chapter III, there was a particular socio-cultural context which led to the kind of mental health service system existing in Greene County at the time of the tornado. Certain factors in that context became less influential after the tornado. However, others, such as prior commitments, conflicts, relationships, interactions, values, beliefs, etc., at both the personal and organizational levels, continued to exist in Time Two. Therefore, much of the behavior exhibited by the established mental health system in Time Two simply reflected these preconditions. On the other hand, the tornado created or brought to the surface a variety of social factors which had not been present in Time One. Some of the subsequent behavior engaged in by the established mental health delivery system was a consequence of these postconditions.

While our analysis will incorporate both the pre- and postconditions influencing the delivery of mental health related services following the disaster, the discussion will primarily be organized around another distinction. As noted in Chapter II, the behavior of any open system is the result of not only internal system processes but external dynamics as well. Thus, in Time Two, one set of conditions affecting the response of the established mental health delivery system were associated with its own internal dynamics. These factors can be broken down into what will be referred to as the intrasystemic dimensions and the microenvironmental setting. The second set of conditions influencing the system's behavior in Time Two were external forces, or those originating outside its boundaries. Similarly these factors can be categorized as the intersystemic dimensions and the macroenvironmental setting.
The specific referents of what are meant by the intra- and inter-systemic dimensions and the micro- and macroenvironmental setting will be made clear in the later analysis. What these terms essentially seek to capture is the following. Social scientists tend to visualize the organized or interlocking behavior of social systems as resulting from two major sources. Anthropologists talk about the cultural and social bases of order (Radcliffe-Brown, 1952); sociologists allude to "two of the major sources of social stability as the normative order and social structure" (Turner and Killian, 1972: 59). In the present analysis the terms intra- and intersystemic dimensions and the micro- and macroenvironmental setting refer respectively to the internal and external social structural aspects and the internal and external cultural aspects influencing the behavior of a social system. The social structural aspects can be further subdivided into basic sociological dimensions, such as social differentiation, social hierarchies and social contacts. Cultural aspects may be divided into norms, values, and beliefs. These general sociological concepts were what guided both the data gathering and analysis of the conditions operative in the situation. However, since the concepts are relatively content-free, the more substantive components of the explanation, to be discussed next, were generated from the data itself.

How then did these two general sets of internal and external socio-cultural conditions affect the response of the established system following the disaster? The general line of analysis argues that, on the one hand, the external or exogenous conditions brought about both quantitative and qualitative changes in the demands made upon the established mental health delivery system after the tornado. On the other hand, the internal or endogenous conditions within the system were such as to affect the capability of the system to respond to these changes in demands. Out of the interplay of increased and different demands from the external environment and reduced and old capabilities within the established system, there eventually emerged a new mental health delivery system attempting to mobilize new capabilities to meet the changes in demands. The characteristics of this new system have already been delineated in Chapter IV. What has to be accounted for in this chapter is why a particular kind of emergent mental health delivery system developed. After all, various emergent alternatives were possible; but it was a particular constellation of components operating within a certain domain and boundaries which came into being. The analysis attempts to account for the specific type of mental health system which emerged in Xenia on the basis of feedback from the interplay of the internal and external conditions operative in the situation. As will be shown, there was negative feedback on the established system to change in particular ways, but it could not do so. However, there was, at the same time, positive feedback on the emergent system to continue to develop the way it was developing, and it did so.
External or Exogenous Conditions

Open systems do not function in isolation. They are embedded in a much larger social setting or environment which consists of physical elements, culture, other organizations or systems, etc. That the behavior of any open system cannot be understood unless it is considered within the context of its environment has been well documented. However, despite the growing literature on this topic both of an empirical and conceptual nature, there is still relatively little agreement among writers as to which elements in a system's total environment actually constitute important determining conditions for system behavior. In effect, what this means is that the set of environmental forces affecting the behavior of a given system cannot be defined prior to making an empirical investigation of the behavior of the particular system in question.

Therefore our study turned to the data itself to gain an understanding of the key environmental elements and the ways by which they were operative in affecting the response of the established mental health system to the disaster. On the basis of our empirical findings, these elements can be grouped into two general categories: 1) the intersystemic dimensions; and 2) the macroenvironmental setting. While the referents for these concepts will be clarified further by our analysis, they may be said to refer respectively to the nature and extent of the linkages between the established mental health system and other groups and organizations, and the general cultural context influencing the characteristics of the established mental health delivery system.

As will be demonstrated, these two sets of conditions were such as to create quantitative and qualitative changes in the demand side of the demand-capability ratio of the established mental health delivery system so that the system was unable to adjust to the altered situation in Time Two. Stated in more specific terms, the exogenous factors led the system to perceive that not only would the quantity of the demands for mental health services increase, but that there would also be qualitatively new demands made upon it for services. These changes in demands went considerably beyond what the established mental health system could handle with its available capabilities.
The concept of intersystemic dimensions is based on the observation that the behavior of any social system is affected, in part at least, by the nature and extent of the linkages between it and other social units in its environment (Warren, 1967). Three generic types of linkages were discernible between the established mental health system and other elements in its environment involved in the delivery of disaster-related services. Each of these three types of relationships had an effect on the system's behavior in response to the disaster. The first of these was the division of labor which existed between the mental health system and other social units in its environment. The second type of linkage was the authority pattern between the established mental health system and elements in the larger supra-system, or the next highest system, in which it was a component. The third type of linkage affecting the system's behavior in Time Two were the social networks, or the extent of interaction and kinds of social contacts, connecting the behavior of the established mental health system with other social units outside its boundaries.

This threefold typology of linkages or interdependencies will be applied in analyzing the external or endogenous conditions associated with the response of the established mental health system to the disaster. However, before turning to this discussion it should be indicated that to state that there were linkages between the focal system and other social units does not necessitate cooperative social relationships, but groups can be linked through partial conflict as well. It should also be stressed that the three types of linkages are not mutually exclusive. Thus, a particular element in a system's environment can theoretically be linked to it by more than one of these three generic types of relationships.

Division of Labor

The concept of a division of labor has reference to the differentiation or specialization of roles and functions between a set of social units. While functional differentiation often produces conflict relations between units, it also serves to bind or link them through increasing their interdependencies on one another (Durkheim, 1933). Applying the concept of a division of labor means that two questions are being asked. First, to what extent were the roles of the various
social units involved in forging out a response to the disaster differentiated? Second, how did this affect the behavior of the established mental health delivery system in Time Two?

The various systems involved in the delivery of disaster-related mental health services in Time Two did have different roles or functions in relation to one another. This can be seen not only in the behavior of the different mental health systems, but also in the behavior of peripheral groups and organizations. The federal and regional mental health officials involved saw the role of the systems they represented as that of providing suggestions and information; there was no implication in any of their efforts at either controlling or supplementing the provision of direct mental health services. In contrast, state and district mental health personnel had a measure of direct and indirect authority and power over the local system; the systems they represented were both financial overseers and general administrative supervisors of the local existing entity. Neighboring mental health systems, especially from the Dayton area, had neither an educational nor overseeing role, but clearly thought of their systems as able to provide direct mental health services for the Greene County system. Similarly, various peripheral groups and organizations, not a part of any formal mental health system but of other community caregiving systems, saw their functions as providing direct supportive mental health related services to disaster victims.

This kind of differentiation - almost a division of labor - which developed among the various systems involved had a significant influence on what happened in Time Two in Xenia. In their interactions with the established mental health system, the representatives of these other systems structured the situation in a particular way. Considerable pressure, sometimes deliberate, sometimes unintentional, was exercised to get the established system leadership to accept the "fact" that there was an overwhelming need and therefore that there would be heavy demands made on the system in Xenia for the delivery of certain kinds of disaster generated mental health services.

This can be illustrated first in connection with the initiatives undertaken by the federal and regional mental health systems, which refers primarily to the NIMH. Although NIMH had no Time One contact with the established mental health delivery system in Greene County, NIMH representatives appeared in Xenia within less than a week after the tornado hit. Local people were bombarded with suggestions, advice, and recommendations about what should be done and organized. Statements, information, and projections were offered about what was likely to develop by way of mental health related problems in the Xenia area. For example, one person from the Xenia mental health system claimed that a federal mental health professional:
told of people in other disasters who had sat in the house for days, didn't eat, just in a state of shock, not making any noise, that is, totally silent. And those who weren't touched by the disaster, who were in a sense indirect victims, but nevertheless in shock...so (X) called them silent problems. (X) said people will always say they're fine, but if you begin by saying, "Are your neighbors having any problems?" they'll begin on the neighbors and then they may very well come back to themselves...(X) was saying that there needed to be intervention for some of those who are now becoming hysterical and who were shaky emotionally beforehand.

The overall theme, as interpreted by local personnel, was that the disaster would not only occasion temporary emotional and psychological problems among the population, but that it would also generate more serious forms of disturbances or mental illness among a rather substantial segment. Since these federal officials were viewed by local mental health personnel as "informed experts", their advice and predictions had considerable impact on the behavior of the local system. On the basis of what they said, the clear implication was that Time Two was going to be a period of high need and, therefore, high demand for mental health services made on the Xenia system.

It is really doubtful that federal and regional mental health officials painted the situation in such stark terms as were reported by members of the Xenia mental health system. As a matter of fact, the perceptions of local officials along these lines, were not totally consistent with our own participant observations at some of the meetings between representatives from the different mental health systems involved. Nevertheless, this was the perception which existed among many from the established mental health system; and, subsequently, it affected the response of the system. As W. I. Thomas (1923: 42) pointed out long ago, "...if a situation is defined as real, it is real insofar as its consequences are concerned."

By contrast, peripheral groups and organizations defined the situation differently. They, too, expected changes in the demands for mental health related services, but they anticipated that these demands would be qualitatively different from those predicted by the NIMH officials. This is indicated in the following remarks made fairly soon after the disaster by a staff member of a Xenia social service agency:

I anticipate people will be needing a lot of different kinds of services in order to come out of this thing and get back on their feet. You know, welfare and social services that we're not accustomed to providing on any large scale in this
community. We will have to be sensitive to their feelings and emotional reactions about their losses, and even about taking the assistance. I mean that is a must. But mental health therapy or treatment! I do not think they will need this any more than they may or may not have before the tornado. We must be prepared to offer some emotional kinds of support and counseling, but this in conjunction with other forms of assistance.

In other words, from the very outset, peripheral groups and organizations thought that there would be an increase in demands for mental health related services in the broad sense of the term. But these were kinds of services which the established mental health delivery system was not accustomed to meeting in Time One.

Thus, on the one hand, the information fed into the planning process after the disaster by representatives from the federal and regional mental health systems led the system to expect a sharp increase in demands for its usual Time One services. On the other hand, the behavior undertaken by peripheral groups to offer "quasi" mental health services in conjunction with other forms of assistance presented the picture that the demands for services by disaster victims would be quite different from the Time One demands on the system.

Therefore, taken as a whole, the behavior of other systems and groups which assumed different roles in relation to the delivery of mental health services in Time Two clearly indicated to the established mental health system that there would be some type of overall change in demands for mental health services as a result of the tornado. More importantly, people from the Xenia system believed these demands could not be met through their existing capabilities. Furthermore, the behavior of the state and neighboring mental health systems had essentially the same effect. However, these latter two systems had other kinds of linkages of an even more binding nature with the established system. Consequently, the effect which the functions or roles they performed in Time Two had on the behavior of the Xenia system will be discussed under the two other generic types of linkages.

Authority Patterns

System interaction without, as well as within, reflects differing layers of control and autonomy. Any open system is comprised of components or subsystems, but it, in turn, is a subsystem of some larger
suprasystem. In such hierarchies of living or open systems, each level has a certain degree of autonomy, but also is to a degree controlled by levels above and below it (Miller, 1965: 229). In short, systems have varying degrees of power or authority over one another. Thus, to understand the behavior of the Xenia system in relation to the disaster, it is necessary to examine the power and authority exercised over it in Time Two by higher system levels.

In Time Two, as in Time One, the State Department of Mental Health had varying degrees of authority and power over the Greene County mental health delivery system. It was under state law that the 648 system was first established. A state agency appointed one-third of the members of the 648 Board, and the state provided three-fourths of the funds for the operating expenditures of the service programs. In addition, the state had the right if not the obligation to audit expenditures, require certain kinds of reports, mandate minimum standards for programs and personnel, approve community service plans, etc. It is true that in Time One this authority was not generally exercised to any great degree. The Greene County mental health delivery system, despite the state's authority to coordinate and supervise, was quite autonomous. However, this pattern changed after the disaster, as is noted in the remarks of an experienced worker from one of the contract agencies in Xenia:

> It has been my experience that the State Department of Mental Health stays out of local affairs as much as possible, but offers their kind of expert advice when help is asked for by the local community in one way or another. I get the queer impression that they don't mess with local political problems and that they leave the local people to deal with their affairs. But they certainly involved themselves with this...I wonder if maybe the state didn't have the national government looking down at them and saying 'What are you going to do about the tornado?'

Whatever motives were attributed, there was a somewhat uneasy view among local personnel and agencies that the state, whether it exercised its authority or not, did have ultimate power over its affairs. This was hardly an unrealistic idea. The total 648 system was certainly not the result of local community initiative. In a sense, therefore, system death as well as birth was part of the residual power of the state government. Less drastically, the state even in Time One was seen as having the power to initiate changes which affected the local 648 systems significantly. For example, the State Department in the months prior to the disaster had moved to increase its authority over the local systems by instituting more standardized personnel policies, salary schedules, and training requirements for
personnel, and it had also expanded its evaluation function in regard to the local 648 networks. Even more importantly, the institution of official service districts by the state was seen by the local 648 Boards as potentially involving the loss of some local autonomy. The ostensible purpose of setting up the districts was to further decentralize state government. But, in actual fact, this move also resulted in the establishment of an intermediate social entity between the local and state levels, one that was less subject to political and other kinds of pressures which normally would be operative at the local level. These and other state activities in Time One left the openly-voiced impression that the power of the state could not be ignored. This impression from Time One carried over into Time Two and was a factor which led the 648 staff to go along reluctantly with the urgings of district and state mental health officials that an organized effort be launched to deliver services to victims of the tornado. In fact, even against what turned out to be the "better judgment" of the 648 staff, these perceived pressures from the state were what eventually culminated in the Three Stage Plan.

The state furthermore took certain concrete actions which led the local system to believe that the post-tornado period was one in which there would be extensive mental health needs among victims and that the local system should take actions to provide additional services. The state moved quickly with financial promises and, at least in the short-run, with actual funds for the delivery of such services. The very unusual step of returning to the 648 Board unspent state per capita money merely highlighted the fact that a system with supervisory and administrative authority over the local system thought the situation to be serious enough to take an almost unprecedented action. These actions reinforced by the continuous presence of high state mental health officials in Xenia in the weeks following the tornado were seen by the established system personnel as pressure to develop certain kinds of mental health services in connection with the disaster. No matter what the intentions behind these moves by the state, the funding offered was perceived as only a more concrete manifestation of this larger pressure to initiate an organized response. Among other things, the state's actions served to remove any excuse for local inaction because of a lack of facilities, funding, or other forms of needed assistance. In fact, to ensure some sort of local response, the State Department of Mental Health even assigned an evaluation team from its central office to maintain close and regular contact with key Xenia officials.

The state's actual authority, its latent power, and the perceived manifestations of both in Time Two further reinforced the prevailing view in the established mental health system that influential and presumably better informed systems thought there were some serious disaster generated mental health problems which had to be addressed. One
local mental health worker, reluctant to get involved, perhaps caught the feelings best when she stated the following:

I thought there would not be a need for mental health services of any kind because people would be absorbed in other problems, physical needs. But people from the state and federal levels seemed to think differently. I didn't feel pressured in my own head to do anything, but I felt pressured by all of these other people, you know, sort of political pressures.

Thus, relative to the federal system, the behavior of the state mental health system had even more of an impact on the Time Two response of the established system in Xenia. There was, however, another mental health system which had a measure of authority over the Greene County system, although this was even more rarely exercised in Time One than the authority of the state. This was the district mental health system which operated out of Dayton. The extent of linkage between the Xenia system and the representative of the district mental health system was by far greater than the social relationships it had with any of the other previously mentioned extra-local mental health systems. The relationship between the two systems actually constituted what has been defined here as a social network.

Social Networks

To the extent that any social system exists, it will of necessity engage in some form of social interaction with other "separate" systems outside of itself. No system operates in a social void. For example, in Chapter III it was pointed out that in many localities across the United States there exist multiple and separate mental health delivery systems functioning in roughly the same geographical areas. Obviously, there is considerable variation in the extent to which such separate systems interact or establish social contacts with one another. At one extreme, there may be very rare interactions with practically no exchange of anything between a particular focal system and even its closest neighboring systems. At the other extreme, there may be a considerable number of contacts between systems involving, for example, extensive exchanges of people, products, information, personnel, funds, etc. In the latter case, it is therefore possible to refer to such intersystem relations as social networks between systems.
Following the tornado in Xenia, certain networks or relationships between the established mental health system and another nearby mental health system had a significant effect on the organized mental health response to the disaster. Specifically, dozens of highly trained mental health personnel from the Dayton mental health system converged on the Xenia area offering their assistance in providing direct services to disaster victims. However, this volunteer behavior was not the result of individual initiative on the part of the persons involved; most of these persons were recruited, briefed, and given release time by their parent organizations. In other words, the convergence of these volunteers was clearly the consequence of Time One linkages between the Xenia system and the nearby Dayton system.

Two components of the Dayton system, both of which had frequent contacts with the Xenia system in Time One, were instrumental in organizing these efforts. The first was the Tri-County Mental Health Association. Since this association encompassed both Montgomery County (the location of Dayton) and Greene County as well, the executive director of the organization had frequent contacts with the organizational membership or staffs of both systems. On the basis of this, about two dozen volunteers from component agencies of the Dayton system were mobilized to participate in the post-tornado efforts in Xenia. The second component of the Dayton system whose actions significantly affected the Time Two behavior of the Xenia system was the Dayton Community Mental Health Center. This organization sent dozens of highly trained professional mental health volunteers to Xenia after the tornado, in fact by far more than any other single outside mental health organization. These actions were facilitated by the fact that when the tornado occurred, the district mental health manager was the acting director of the Center. The frequent contact and interaction between the district mental health system and the Xenia system in Time One was therefore continued into Time Two.

Thus, because of the pre-disaster network relationships between these two components of the Dayton system and the Xenia system, personnel, information and other resources were transferred in the immediate post-impact period. In the first few crucial days after the tornado this event was perhaps one of the most important determinants of the actions taken by the Greene County system. In fact, the two previously mentioned components of the Dayton system clearly initiated their own response to the disaster even prior to any actions being taken by the Greene County 648 staff in relation to the disaster. How then did the social network between these two systems ultimately affect the behavior of the established mental health delivery in Xenia in Time Two? Basically the behavior of the nearby Dayton mental health system defined the situation as one in which there were disaster generated mental health needs and demands for services which could not be met by the local established system in Xenia. This opinion of the
local system was rarely voiced openly by the outsiders. However, occasionally the view was explicitly stated, as it was in the following remarks made by a key Dayton mental health official:

I think that the reason that so many of us went in to offer our assistance was because the whole mental health system in Greene County was a weak system. I don't know if I would say it was the 648 Board alone, but that the whole system was weak. And in the face of this kind of disaster, it seemed that there needed to be as much help as possible from the outside. It was obvious that the staff was not able to function, and I didn't see the Board function. They were knocked out, the staff offices that is. I think the state people recognized that they needed something more than their own resources were able to provide. I mean, my God, what do they have over there?

In addition, the outside groups had certain images of the kinds of help to be rendered and the specific types of services which should be provided to meet the supposed needs and demands. An outside mental health worker stated it as follows:

This came from our meeting for those who were designated to be going over to work with the walk-ins. It was stated that there would be four likely groups. There would be the children, in which case we should do psycho-drama with. We would have adults who were in the first stage with the shock, from the spectrum of confusion to the out-and-out full psychosis. Next we would see dependency relating to aggression from guilt to depression. We were not to be sympathetic. There would be no hand holding. It was to be treated by confrontation, "What are you going to do about your problem?" The third group would be the elderly who would be confused, disoriented and may need hospitalization. Then there's a marginal group, sort of a catchall. But they were such as alcoholics whose need was for drinks since the liquor stores were closed and the bars were wiped out. There would be also those who were considered mental patients to begin with, the former patients.

Since most of the assumed difficulties described are seen as disaster generated, it is clear that the imagery of Time Two demands are different from those in Time One.
Social networks were also a factor in the response on non-mental health systems in the Xenia area. In Time One there were, as discussed previously, very weak links or little by way of social networks between the established mental health delivery system and what have been referred to as peripheral groups and organizations. By and large, this absence of interaction persisted into Time Two, with the exception of the few meetings held in the first ten days after impact. However, by contrast, in Time Two, interaction between these other community care-giving organizations outside the boundaries of the formal mental health system increased. This resulted in the emergence of certain social networks between such groups. Stated differently, the behavior of certain elements in the environment of the established mental health system was becoming more interdependent. Emery and Trist (1965) have referred to this type of an environment, i.e., one where the external components are themselves connected as a system, as a "turbulent field." In such an environment new dynamic processes arise from the field itself. The overall effect of this type of environment is to reduce the autonomy of the focal system, since it is forced to adapt to external conditions which are both complex and changing in their connectedness.

In Time Two, the established mental health system increasingly found itself in such an environment. For example, facilitated by the previously discussed interagency meetings, the activities of community care-giving systems and organizations outside its boundaries became more interdependent in Time Two. The formation of these networks eventually had a significant effect on the behavior of the established and more formal mental health system by contributing to the imagery that there would be a change in demands for mental health related services. The most obvious example of this was the coming together of the clergy to form Interfaith. This emergent group subsequently came to define a different set of new mental health needs and demands to be met as a result of the disaster. Perhaps most important, they, like other groups, saw the established system as unable to meet these changes in demands. Ultimately the influence of these emergent and interdependent forces in the environment of the established system became amplified to the point that the lines of action it undertook in relation to the disaster, specifically the Three Stage Plan, were attenuated.

To summarize, whether by actions or words, representatives from other systems conveyed to the established mental health system a similar picture. As a result of the disaster, the demands for mental health related services were going to be both qualitatively and quantitatively different from those which it was accustomed to meeting in Time One. Of course, not all of these systems concurred as to the specific nature of the mental health needs and demands which might be expected. But on one matter they all seemed to agree: the disaster was bound to trigger changes in demands. The almost universality and
unanimity of this definition of the situation, supported by the concrete and definite actions taken by these other systems, could not help but convey to the established mental health delivery system that it was faced with a rather different situation in Time Two than it had been in Time One. That perhaps some of the representatives of the local system perceived this to a greater degree than was actually intended was largely irrelevant insofar as the system's response was concerned. Accurately perceived or not, the behavior of the external elements with which the system interacted in Time Two became key determinants of its actions.

There were also other external factors in the larger macroenvironmental setting which reinforced the perception that there would be changes in demands for mental health services in Time Two. Our discussion now turns to an examination of the way in which these conditions were associated with the activities undertaken in Xenia after the tornado.

Macroenvironmental Setting

At present there is still a lack of conceptual agreement among sociologists regarding those portions of a system's environment which have a significant effect on the structure and functioning of open systems. Most sociological analyses tend to focus on the immediate task environment, thus primarily emphasizing other social units with which the system under analysis interacts as the most important determinants of its behavior. In our analysis these factors have been treated under the concept of intersystemic dimensions. While these elements were indeed found to have been an important influence on the behavior of the established mental health delivery system in Xenia after the disaster, other endogenous factors were also operative in the situation. These segments of the system's environment can be called the macroenvironmental setting.

In general terms, the macroenvironmental setting of an open system refers to the larger cultural context affecting its behavior. There are a number of studies indicating the importance of such broad environmental conditions for system behavior, although none of these employ the exact term of the macroenvironmental setting introduced here (Farmer and Richman, 1964; Shein, 1965; Hesselink and Konnen, 1969; Clark and McCabe, 1970; and Osborne and Hunt, 1974). What this concept essentially refers to is such cultural aspects as the norms, values, and beliefs within which a system operates. In many ways, this segment of a system's environment is not actually unique to any one system, but includes broad factors or forces recognized to be
important influences on all systems which share similar goals and operate within similar socio-cultural areas. If this is the case, how were these larger cultural factors specifically associated with the response of the established mental health system in Xenia after the tornado?

Contrary to widespread but mistaken notions, cultural norms, values, and beliefs do not cease to be guiding factors for behavior at times of great stress. This is true even at the height of the emergency period following a large-scale natural disaster. In fact, as Quarantelli (1975) has pointed out, cultural factors are even involved in individual panic flight behavior, the opposite end of the continuum insofar as organized social behavior is concerned. Cultural conditions, of course, become more operative in the later stages of Time Two after the disaster. If anything, basic norms, values and beliefs are much more salient at such times (Turner, 1966). Subsequently, they are very influential in affecting the behavior of social systems responding to disaster situations. This is what happened in Xenia. Certain cultural factors prevailing in the larger or macroenvironmental setting in which the established mental health delivery system functioned affected the perceived demands for services. In general, these cultural elements supported the overall definition that in the wake of the tornado, both increased and different kinds of demands for mental health services could be expected.

Different cultural aspects contributed in different ways to produce what might be called an overall cultural or social atmosphere which was conducive to launching a major effort to provide mental health services following the disaster. In addition to these normative expectations, certain cultural values supported the notion that offering mental health services in relation to the disaster was an appropriate activity or something which was worthwhile doing. In particular, taking actions of this nature was quite consistent with the growing cultural value in American society that people have a "right" to positive mental health, rather than just the absence of mental illness. Finally, not only was there a pervasive cultural atmosphere that something should be done, and that it was worthwhile doing, but most important of all, the belief was held that it could be done. There were, of course, competing beliefs about how and what kinds of specific services could be offered, but all assumed that there was a viable way of providing mental health related services in connection with the disaster.

These cultural specifications and assumptions had a significant effect on what happened in Xenia after the disaster. In short, they contributed, as did the intersystemic dimensions, to the emerging definition that there would be a change in the demands for mental health services resulting from the disaster. Furthermore, the larger cultural
context supported the imagery that these needs and demands should and could be met in a worthwhile way by the organized providing of mental health services.

Normative Expectations

The normative expectations operating in the Time Two period clearly prescribed that some sort of action be taken to meet the mental health needs and demands of disaster victims. However, this is not to say that these norms were always fully accepted by every mental health official in the Xenia area. Nevertheless, after the disaster it did occur to some local and extra-local mental health professionals that the system had a responsibility to respond in some way to the event. Many of these persons had difficulty in clarifying even to themselves exactly what the role of the existing system should be. The mission of the mental health system was to be responsive in crisis situations, but few officials were absolutely certain as to what this implied other than that there were victims out in the stricken community who had needs which ought to be met. This general view is expressed in the remarks of one local professional who said:

It just seemed to make sense that there was a lot of help that could be and really needed to be provided to victims by mental health agencies. I had no idea about what was done in other disasters, not until later on when some of the experts came in and told us. But the idea that we could do something to help was just a common sense notion that came I guess from a lot of our own attitudes about what the role of mental health should be in supporting people in situations like this. I guess it just seemed to make sense that we should be doing something to help too. But we didn't really know exactly what that something should be.

There were also other norms operative in the larger social setting - some actually at the national level - which even more clearly specified that something should be done in relation to the disaster. Specifically, there was a legal norm prescribing certain actions which were to be undertaken by the NIMH in disaster situations. As noted in Chapter III, on May 22, 1964, federal legislation was enacted charging NIMH with the formal responsibility for helping local systems to provide mental health services following a major disaster.
Although this law was not actually passed until a month after the Xenia disaster, it nevertheless had an impact on what occurred right after the tornado. The fact is that, while NIMH as yet did not know exactly how it would carry out its future disaster responsibilities, it was clear that they would soon be called on to respond in some fashion. Thus, when the tornado struck in Xenia, it was inevitable that NIMH would take some type of action. In other words, what is being suggested is that the unusually active role played by NIMH in Xenia was not brought about by the expectation that the mental health needs and problems created by that particular disaster would be more massive or pervasive than usual. Rather, it was a function of the responsibilities delegated to the federal system under the new law. No matter where the next disaster had occurred, it was very likely that NIMH would have become heavily involved. Subsequently, because the delivery of mental health services to disaster victims had been previously defined by the federal legislation as an immediate and imperative issue, the stage was set for NIMH officials to go into the Xenia area and to exercise considerable influence on the tornado-relevant activities of the established mental health delivery system.

Thus, there was a general expectation that there should be a response, and there was one. More important, the very act of responding in conjunction with the information and suggestions advanced by NIMH officials contributed to the general definition that there would be new mental health needs as a result of the disaster. It was easy to surmise from this that there would also be a change in demands for such services.

Value Priorities

The norms operative in the larger environmental setting were also congruent with certain prevailing American cultural values which generally support the idea that the providing of mental health services to people is an appropriate activity, or something worthwhile doing. In fact, it will be shown that the dominant theme of these values is that, in American society, a person not only has the right to be relieved of psychologically induced discomforts or mental disorders, but one is also entitled to positive mental health, a state which presumably can be defined as an overall sense of personal and social well-being.

The nuclear or focal value-orientation supporting the above notion concerns the nature and worth of the individual in American society. Writing in 1897, Durkheim has incisively described this pattern of values in Western society which he referred to as "the cult of individual personality" (1951). Basically this cult places a high value
on the unique development of each individual personality and is correspondingly adverse to invasions of individual integrity. Furthermore, to be a person in this sense, is to have a personal sense of worth, to be independent, responsible, unique, and self-respecting (Williams, 1970: 495). Put in more contemporary terms, what is positively valued under this type of cultural framework is not just any kind of personality, but a certain kind of individual - one who is self-actualized or has reached his own potential, one who is personally fulfilled through the pursuit of meaningful goals, one who is spontaneous but self-regulated, one who is free from psychological and social constraints but conforms to shared standards of the culture. In general terms, these constitute the core criteria of psychological well-being in American society. According to Durkheim, what is unique about American society in this regard is that this type of personality is not valued simply as a functioning member of the larger collectivity, but is something of intrinsic worth which is, in a sense, elevated above the worth of the collectivity.

As Williams (1970: 496) has pointed out, a high valuation of the individual is often difficult to maintain under conditions of great stress and adversity, such as a natural disaster. In such situations, great urgency is felt for accomplishing collective tasks which require a certain degree of sacrifice on the part of individuals. Since there are cross-cultural differences in the value placed on the individual in relation to the society as a whole, there are likewise cross-cultural differences in the categories of help provided in disaster situations (Clifford, 1955; Roth, 1970; Kates et al., 1973; McLuckie, 1975; Dynes, 1975). For example, some societies in which DRC has conducted disaster studies, such as Iran and El Salvador, tend to exalt the collectivity over the individual, and this subsequently affects the types of services rendered by official agencies following a large-scale natural disaster. In American society, because of the value placed on individuals, there is considerable emphasis on providing governmental and other types of assistance directly to individuals in the wake of major disasters. In recent years this has come to include meeting the mental as well as physical needs of disaster victims. As evidenced in studies of disasters and disaster planning, this is a cultural ideal almost unthought of in societies around the world which do not elevate the worth of the individual above that of the group.

Furthermore, the value concerning the worth of the individual coupled with the value placed on democracy in American society has been strongly reinforced by certain cultural drifts and trends (Blumer, 1966: 200) which came to the fore in the decade of the 1960's. During this period, it came to be recognized that the ascription of value to individuals even in the United States was accorded to a large degree on the basis of particularistic group memberships, such as race, class, ethnicity, religion, sex, and related social categories. It further became increasingly evident that just as American society could produce
successful individuals, it also could produce disadvantaged persons: criminals, drug users, alcoholics, mental patients, neurotic personalities, the socioeconomically deprived, and scape-goated minorities. The idea that these disadvantaged persons could be produced by the socio-cultural context itself represented at least a partial turning away from the traditional dominant American themes of the rugged individual who determined his own fate and the survival of the fittest orientation. In short, a struggle between two sets of basic values emerged - democracy and the cult of the individual personality.

Responding to the social eruption of the sixties, American society moved into a transitional state during that decade. On the one hand, it was moving in the direction of a more collectivist orientation by becoming a more service supported society (Moynihan, 1969). On the other hand, the view prevailed that social problems generated by the society could be reduced by the widespread dispensing of cures and remedies at the individual rather than the societal level. Thus, the sources of most social difficulties still tended to be defined in individual terms, becoming rooted more specifically in the psychology of the individual and the supremacy of intrapsychic factors. The socio-cultural context was at best seen as background noise and, at worst, ignored. The dominant concern of 20th century American man therefore became the search for a sense of personal and psychological well-being (Klapp, 1972; Lasch, 1976). Consistent with the also prevailing American democratic values, every person was thought to have a right to such a state of positive mental health. In fact, they were promised this through federal mental health legislation and funds. As Sarason (1974) points out, "the community mental health act of 1963 reads like the psychological equivalent of the economic goal of a chicken in every pot and a car in every garage."

As can be seen, these larger American cultural values contribute substantially to the idea that mental health services should be provided in relation to large-scale disaster situations. For one, they support the notion that, in general, the providing of mental health services to individuals is both an appropriate and worthwhile activity. Furthermore, given the value placed on the psychological worth of the individual in American society, it almost logically follows that in the face of the adversities, losses and deprivations which disasters bring to bear on individuals, actions should be mobilized to meet the psychological and mental health needs and demands presumed to be elicited by such events.

Following the Xenia disaster, these cultural values were reinforced by the fact that mental health needs and demands seemingly had been present in connection with other recent disasters in the United States. In fact, several of the professionals involved in providing disaster generated mental health services in the Wilkes-Barre and Corning floods were among the "experts" brought in to assist the
local system. These persons attested to the delivery of mental health services following other major disasters. They not only confirmed the existence of a change in demands for mental health services in connection with these disasters, but they argued that the providing of such services had proved to be worthwhile.

Belief Assumptions

Cultural specifications also include beliefs and conceptions about whether or not something can be done. Thus, while values and norms respectively concern standards of desireability and rules of conduct, beliefs shade into empirical knowledge; beliefs have to do with what exists or can be made to exist (Williams, 1970: 27). From what has been discussed earlier it is perhaps evident that the community mental health ideology or belief system had a powerful influence on the activities undertaken in Xenia following the tornado. The basic tenets of this approach to mental health care have already been examined in considerable detail in Chapter III. Therefore, the discussion here will be more selective, focusing primarily on how the assumptions of this belief system lent support to the notion that mental health services could be organized to meet the needs and demands elicited by the disaster.

Under the community mental health ideology, the role of the therapist or care-giver has been so greatly extended that it now includes almost any type of "treatment" which will ensure the overall social and psychological well-being of its constituency. Most important of all, the approach claims that it can actually offer the services necessary for a client to achieve this state of well-being or positive mental health. In fact, to meet this rather broad objective, new therapeutic techniques are constantly emerging on the marketplace. In this connection, Parloff (1976) has recently noted that, at present, there is an array of at least 130 different approaches to psychotherapy alone. All strive for slightly different goals and all make somewhat different appeals. However, what unites them all is the fact that the objectives they pursue are intimately associated with current American cultural standards of well-being and social effectiveness. In the opinion of several recent writers the community mental health doctrine has gradually transformed psychotherapy into the major method for achieving the personal health, fulfillment, self-improvement, and personal worth which are so central to the dominant value-orientation in American culture (Dinitz and Beran, 1971; Sarason, 1974; Lasch, 1976).
In fact, American society more than any other, has wholeheartedly embraced psychotherapy. The culture is saturated by various forms of psychotherapeutic experiences, ranging all the way from the development of encounter and sensitivity groups within many business, schools, and even churches to "consciousness raising" and other self-help groups in the women's movement. A person can even perform amateur psychotherapy on himself by purchasing one of the hundreds of self-help paperbacks on the market today. Reacting to this pervasive spread of psychotherapy in contemporary American society, some have gone so far as to suggest that psychotherapy has gradually assumed several key functions once performed by religion - the passing of judgment on "good" and "evil", calling these "health" and "sickness"; and the affectation of spiritual or moral transformation among its constituency (Hiltner, 1963; Lasch, 1976).

Whether or not this analogy is an apt one, it nevertheless cannot be denied that under the community mental health ideology the boundaries of mental health treatment, which were never firm, have become increasingly ambiguous and infinitely expansible. This approach more and more claims that the appropriate concerns of the mental health professional are any type of personal or social problem - crisis or otherwise - which poses a threat to our psychological well-being. Even more crucial, this belief system claims that these problems can be ameliorated by the broad new range of therapeutic techniques performed by the mental health practitioner.

Given these expansive claims of the community mental health ideology, it is not difficult to see how these beliefs supported the imagery that there would be changes in the demands for mental health services following a crisis such as the Xenia tornado. Further, the idea that these demands could be met by mental health practitioners - be they professionals or paraprofessionals - was consistent with the larger belief system. As a matter of fact, as pointed out in Chapter III, several new intervention procedures had even emerged to handle various types of crisis situations, most notably crisis intervention. But, even if these had proven ineffective in the Xenia situation, according to the tenets of the community mental health ideology, almost any kind of new therapy could have been employed. In fact, politics itself could have been mobilized as a form of therapy.

In short, whether or not mental health services could be provided to meet the changes in demands anticipated as a result of the disaster was not really an overriding issue. Of course, precisely how this was to be accomplished was open to question, and was a matter about which there was little agreement in the weeks following the tornado. But in recent years, the usual response of the community-oriented mental health professional to such a dilemma has been to invent or design some new method or technique whereby this can be done. And, in fact, this was precisely the response which occurred in Xenia following the tornado.
Thus, taken all together, forces in the larger cultural context or macroenvironmental setting in which the Xenia mental health system functioned were important influences on its behavior after the disaster. To recapitulate briefly, the cultural aspects of this larger setting not only prescribed that it was appropriate to deliver mental health services to disaster victims, but that these services both should be provided - in fact, there was even a legal norm to this effect - and could be provided by the local mental health system in Xenia. Furthermore, the norms, values, and beliefs operative in the general macro-environmental setting pointed in the same direction as did the inter-systemic demensions, or the more structural aspects of the system's environment. These two sets of conditions impinging on the system from outside its boundaries supported the general idea that there would be changes in the demands for mental health services as a result of the disaster and, further, that the established mental health system in Xenia should respond in some way to meet the demands.

In principle, the changes in demands could have been met by equivalent and parallel changes in the capabilities of the established mental health delivery system. Other kinds of community service systems meet such crisis situations by activating their normal emergency capability, that is, their disaster plans. Of course, in many ways, what was being done in Xenia was rather unprecedented. Therefore, the Xenia mental health system had no such formal capability. Its adaptive capacity therefore depended on whatever it could muster from Time One and whatever modifications or alterations it could make in Time Two. To add to the situation, the established system as noted earlier actually lost some of its Time One capabilities as a result of the tornado. In the immediate post-tornado period system activities were also impeded by the loss of electrical power, the damage rendered to agency buildings, and the fact that a number of agency staff members had themselves been direct victims of the tornado.

However, the reduction or loss of physical capabilities, while undoubtedly disruptive, was not a terribly significant factor explaining the adaptation of the established system to the new demand situation created by the tornado. Most system components escaped any material damage whatsoever. Disruptions occasioned by the interruption of the personal and family life of the workers in the system in almost all cases lasted only a short time. In addition, the state moved quickly to supplement the system's physical resources. State representatives not only initially offered to obtain a trailer to house the 648 staff, but eventually supplied 100 percent of the funding for the facilities leased for several months by the 648 staff and the Guidance Center. Thus, the physical capability of the established mental health delivery system in Time Two was rather quickly restored to roughly the same level it had been in Time One. To be sure, the temporary nature of the office quarters and the loss of some records did not quite allow the total reestablishment of operations. However, in a fundamental sense, the mental health delivery system as a whole suffered only a
temporary loss of physical capability. Outside of the first week after
the disaster, whatever was or was not done by the system was the result
of factors other than the material resources available.

The basic difficulty which the system experienced in adapting to
the disaster resided in the internal socio-cultural conditions affect­
ing the established mental health delivery system in Time Two. These
conditions were such as to preclude the system from being flexible
enough to adjust its capabilities to the changes in demands. In fact,
the internal dynamics of the system were such that they almost could
not occur within the established system, thereby setting the stage for
the emergence of a new delivery system. Our discussion now turns to
an examination of these internal or endogenous conditions.

Internal or Endogenous Conditions

Social systems are not static. Nevertheless, they always operate
under certain constraints. This means that no system is indefinitely
plastic, or capable of adapting to just any set of new demands made on
it. Rather, there are always internal dynamics and system processes
which not only shape the behavior of a system, but also set limits on
the types of external conditions to which it can adapt. Although the
internal factors which shape the behavior of any system can be viewed
in various ways, the two most generic ones are the social structural
arrangement and the cultural make up or guidelines within which it op­
erates. Thus, just as the external sociocultural factors influencing
the behavior of the system in Xenia were examined in terms of inter­
systemic dimensions and the macroenvironmental setting, a parallel set
of concepts can be applied in analyzing the internal or endogenous con­
ditions associated with the system's behavior after the disaster.
These are the concepts of: intrasystemic dimensions, i.e., the divi­sion of labor, the authority patterns, and the social networks within
the established system; and 2) the microenvironmental setting, i.e.,
the cultural norms, values, and beliefs operative within the system.6

As already indicated, these internal conditions were such as to
affect the capability of the system to respond to the perceived changes
in demands previously documented. Stated differently, the internal or
endogenous conditions were associated with the capability side of the
demand-capability ratio of the established system. As it turned out,
these factors were such that they prevented the established system
from adapting its capabilities so as to be able to meet the disaster
generated changes in demands.
Intrasystemic Dimensions

It has been pointed out that in general the established mental health delivery system did not respond to the disaster. Of course, what was meant by this is that, while most of its components did not attempt to deliver any disaster-related mental health services whatsoever, even those which did were, by and large, unsuccessful in their efforts. The activities mobilized by the 648 staff under the Three Stage Plan were aborted due to a lack of client demands. The services attempted by the Guidance Center also failed from an overall lack of demands. The possibility of organizing other kinds of strategies to meet disaster-related demands for mental health services was truncated by the internal organization or structural aspects of the system itself. In other words, as will be demonstrated by the ensuing analysis, the division of labor, the authority patterns, and the kinds of social networks within the system prevented it from altering its capabilities so as to adequately deal with the changes in demands brought about by the disaster.

Division of Labor

As described earlier, the established mental health delivery system in Time One consisted primarily of a cluster of agencies linked to the 648 Board and staff. One aspect affecting the adaptive potential of the system after the disaster was its pattern of structural differentiation. By structural differentiation is meant the extent to which the system was formally subdivided to pursue specialized tasks or services. In Chapter Three it was pointed out that in Time One the components of the Greene County mental health delivery system each operated in relatively narrow and specialized domains. For instance, one agency, the Crisis Center, had the function of providing crisis intervention for drug users; while another, Yellow Springs Senior Citizens, had the responsibility for providing recreational and referral services to the aged. Another organization, the Guidance Center, provided outpatient services; and still another, the 648 staff, concentrated on planning and resource allocation. Of course, the division of labor was not total, since some of the components did provide overlapping or duplicating services; for instance, there were three components offering some type of aftercare services and three which provided drug-related services. Nevertheless, by most criteria, the Time One mental health system in the Xenia area was a relatively highly differentiated
one. Even those agencies which served the same target populations, such as drug users, were differentiated according to the specialized treatment modalities which they offered to these groups.

Actually a high degree of structural differentiation in itself can contribute to an effective adaptation to stress situations. Research has found, for instance, that highly differentiated organizations or systems are often more effective in changing or "turbulent" environments than those exhibiting low differentiation (Burns and Stalker, 1961; Lawrence and Lorsch, 1969; Hage and Aiken, 1970). When a highly differentiated system is subjected to sudden changes in demands, there is in general a greater probability that one or more of its subunits will have at least some of the capabilities necessary to meet the changes in demands. However, this is not always the case. When this type of circumstance arises, a high degree of structural differentiation may produce the opposite effect. It can actually prevent a system from being able to spawn the appropriate innovations.

As Lawrence and Lorsch (1969) point out, increased differentiation involves more than just an increase in specific functional or task areas. Each subunit or component of a system is likely to habituate itself to certain ways of doing things and approaching problems, to familiarize itself with different sets of treatment strategies and clients, and to interact with different elements of the system's larger environment. These processes produce a certain amount of inflexibility in the organizational components of a system and, therefore, in the system as a whole.

Thus, in general the extent of structural differentiation or task specialization can affect the adaptive potential of a mental health delivery system in two ways. First, to the extent that a particular system offers highly specialized services - i.e., they are geared either to specific target populations or particular categories of client problems - changes in the demands for services would tend to necessitate either adaptations in the services offered by existing agencies or the generation of new system components. For example, if a system's only crisis intervention service is operated in conjunction with a drug program, then the demand for crisis intervention by other target populations and in connection with other client problems would require either broadening the target population of the drug agency or setting up a different crisis agency. In other words, a highly specialized service network is severely restricted in terms of its ability to adapt to rapid changes in mental health needs through its existing service capabilities, whether these be disaster-related or otherwise.

Secondly, while a high degree of service specialization among system components may be advantageous along some lines, it can, as stated above, also lead to a lack of flexibility in a system. That is, the
specialized knowledge, treatment strategies, and other technical skills utilized in performing concentrated services may be inappropriate for dealing with other client problems. For example, it would be extremely difficult for an outpatient clinic specializing in individual or group psychotherapy to quickly transform itself to deliver more generic human services or crisis intervention. Subsequently, the greater the degree of task specialization exhibited among the components of a mental health system, the less likely it is that the system will be able to provide new and different services through its existing capabilities. In such a system it is therefore probable that when new services are demanded, the primary mode of adaptation will be to develop new and different components rather than to modify the tasks or services of existing ones.

Applying these ideas to the Greene County mental health delivery system will demonstrate how the division of labor which it had evolved influenced the organized response to the disaster. Most of the service agencies comprising the system, as stated before, were highly specialized. They were geared either to specific target populations or were centered around particular intervention techniques or treatment modalities. It is not surprising that the Crisis Center, the one existing agency which did modify its services in response to the tornado, was much less specialized than others in the local system. On a routine basis it employed a myriad of intervention strategies and offered its services to a far broader population than its ostensible target category of drug users. Furthermore, its day-to-day activities were relatively adaptable to the demands of Time Two. On the other hand, the Guidance Center, a highly specialized outpatient agency, found it extremely difficult to adapt its services to the needs of disaster victims. For the most part, it was boxed in by its pre-disaster tasks. In fact, the agency's overall lack of flexibility was evident even in the kinds of services it considered providing after the disaster. Its own building having been destroyed, the Guidance Center staff considered the possibility of using trailers on loan from the state to institute a new disaster-related service. As can be seen from the following remarks made by an agency staff member, the services were not innovative in spite of their outward appearance, but were, in fact, almost identical to the organization's Time One activities:

One of the ideas we had about serving victims at first was to get a trailer and use the trailer as a traveling office. Maybe even doing not just one-to-one interviews, but maybe even doing groups in the trailer. We would not in that way be just barging into someone's house and invading their privacy...We thought about getting a trailer even big enough to house 16 offices.
The other components of the established mental health delivery system were likewise task specialized in the domains, serving such target groups as the aged and the ex-hospitalized. This meant that, on the whole, the system lacked the necessary flexibility to alter its capabilities to respond to the changes in demands produced by the tornado. Furthermore, the relatively high degree of structural differentiation acted in another way to constrain the development of the new capabilities necessary to meet the changes in disaster generated demands. As will be discussed in a later section, the differentiated units of the system had heterogeneous goals and sometimes radically conflicting orientations, a situation which was not conducive to a high degree of system integration.

Authority Patterns

As noted in Chapter III, prior to the disaster authority in the Greene County mental health system was somewhat decentralized. Although the 648 Board functioned as the primary decision maker regarding the planning, establishment, and funding of service priorities, it did not however have control over certain other affairs of the contract agencies or system components. More specifically, the contact agencies enjoyed a degree of autonomy over: 1) certain of their own activities, particularly the actual technologies they employed in delivering the services contracted for by the 648 Board; and 2) some of their resources, such as the selection of staff and agency board members. This pattern of authority, where control is distributed at varying levels within the system, is not atypical of highly specialized systems. It is based on the notion that in systems characterized by increasing specialization, upper echelons, the 648 Board in this case, lack sufficient understanding to make decisions regarding technical matters. Therefore some degree of control is delegated to the lower echelons, in this case the contact agencies, since they are presumed to be in a better position to make decisions about specifically technical matters (Perrow, 1970).

Thus, under the 648 structural arrangement, while decision making in regard to some of the system's affairs was highly centralized, the 648 Board did not in general exercise a high degree of unrestricted discretion over the service delivering components. For example, the contract agencies to some extent were allowed to alter their treatment strategies or technologies in the face of changing demands, new discoveries in the social sciences, and the norms of the mental health professions. On the other hand, under no circumstances were the agencies permitted to carve out major reorientations in their overall
organizational domains without the approval of the 648 Board. Therefore, if an agency's contract with the 648 Board specified that it was to deliver outpatient services to a particular target population, it could do this by virtually any method thought to be effective. Yet, it could not suspend these services without the approval of the 648 Board and stake its claim to a new domain or sphere of operation, such as providing aftercare, education and consultation services, etc.

What sort of implications did this type of decentralized authority pattern have for the response of the established mental health system to the disaster? For one, it worked against a swift response on the part of the system. Crisis situations almost invariably require that decision making processes be hastened (Dynes, 1974: 167). In general centralized authority tends to facilitate rapid decision making more than does authority which is located at various levels within a particular system. Furthermore, the nature of the control exercised over the service network by the 648 Board restrained any independent moves by the established system components to alter their services in the face of the disaster. This relationship between a low degree of autonomy and a lack of initiative in undertaking new domains has also been observed in other crisis situations (Brouillette and Quarantelli, 1971: 43).

On the other hand, the span of control exercised by the 648 Board was not broad enough to allow its staff to initiate major and radical changes in the activities of the existing service components without their approval and cooperation. For instance, under the Time One pattern of authority, existing agencies were not required to change their actual technologies or intervention strategies, even if they were requested to do so by the 648 Board. In regard to this, a staff member of the Guidance Centers observed:

I think that the 648 Board would like us at the Guidance Center to go out of our offices more. One of the problems is that what a lot of people construe as outreach is oftentimes to visit people who have not invited you to come visit them. For example, the courts have at times expressed the desire that we go out and visit the homes of someone being considered for probate court because they want them in a mental hospital. Most people don't want to be probated to a mental hospital, and won't go voluntarily. So we have been kind of reluctant to invade people's homes. We did not want to be used by the court in terms of social control, you know. It is usually another family member who reports the person, so it's a family quarrel, and we find ourselves in the middle of the quarrel, and it's
none of our business. So, in spite of 648's wishes, we have stayed away from outreach kinds of things. They just don't fit with the model we operate under here.

What can be seen in the above remarks is the usual tendency of all formal groups to resist changes in their organizational arrangements and activities (Starbuck, 1965). This pattern of agency inflexibility in combination with the autonomy retained by the contract agencies under the 648 structural arrangement severely limited the ability of the 648 Board to rapidly institute major changes in the domains of the established system components in order to meet the changes in demands produced by the disaster. In effect, the 648 Board had come to realize long before the disaster that under the prevailing distribution of authority, the most effective way to implement major changes in the service network was to create new agencies, rather than to try to revamp old ones. Of course, it is possible that after the disaster some established system components could have made short-run changes in their domains in order to meet disaster generated demands. However, this assumes an improbable flexibility in their structures, an expertise in other types of technologies, and, ultimately, on the priorities established and resources allocated by the 648 Board. For example, a particular outpatient clinic simply might not have the organizational arrangements, let along the other resources necessary to provide outreach services following a disaster. Even if it did, these activities would doubtlessly require approval and other forms of support from the 648 Board.

Thus, in general, the relatively decentralized authority pattern exhibited by the established mental health system in Xenia not only worked against a rapid response to the disaster, but it prevented the generation of new capabilities within the existing system to meet the changes in demands elicited by the disaster. To the extent that this was the case, the emergence of new groups which could mobilize the needed capabilities was almost inevitable. This, of course, was bound to delay the overall response to the disaster. Without a doubt, the establishment of entirely new organizations, even under nonstressful circumstances, is not something which can be accomplished quickly.

Social Networks

Another factor associated with a system's ability to respond to changes in demands is the extent and manner of linkages between its components. For example, in his study of multi-organizational systems in 130 cities around the United States, Turk (1973) found that the
linkage available among a set of social units is positively correlated with the collective level of demands met by the larger unit. In addition, a high degree of system interdependence is associated with fewer gaps in task or service areas as well as with fewer duplications of effort. This leads to the view that some degree and manner of linkage among the components comprising a system is a necessary antecedent of a relatively balanced demand-capability ratio. Stated differently, to perform effectively in either a stable or a turbulent environment a system must be in some way integrated. In addition, a high degree of system interdependence is also a factor influencing the rapidity with which a system can respond to changes in demands.

Of course, the concept of system itself means linkages and relationships. However, there are a number of ways and degrees by which a set of social units may be linked or integrated as a social whole (Landecker, 1951). For example, a set of social units can be integrated by the pattern of authority within which they function. It has already been stated that the components of the Greene County system were only nominally linked by the relatively decentralized authority pattern which existed within the system. Social units may also be integrated or linked through the division of labor which exists between them. However, lacking a strong focal coordinating unit, the degree of functional differentiation within the Greene County system was more divisive than it was integrating. Nevertheless, even if the units of a system are linked either through functional differentiation or the authority pattern in which they function, the actual behavior or activities of system components in meeting routine demands may still fail to be highly interconnected. A high degree of component interdependence is, in the latter sense, related to the social networks which exist among a system's components. By social networks is meant linkages based on routine interaction, communication, contacts, and other exchanges between subunits of a system. While units linked through such processes may be said, on the one hand, to be highly connected or integrated, it need not be assumed, on the other hand, that the linkages are always of a cooperative nature. Nevertheless, cooperative or conflicting, the more comprehensive the network of social contacts between subunits of a system, the greater the extent of connectedness in the activities or services provided by a system. In turn, the greater the number of social networks permeating a system, or the better integrated the system, the greater its capacity to adapt rapidly and as a whole to changes in demands (Turk, 1973: 7).

An examination of the Greene County mental health system reveals that prior to the disaster, there were few social networks either of a cooperative or a conflicting nature between the components of the system. As was stated previously, the relatively autonomous organizations comprising the Greene County mental health system were differentiated in their service delivery functions. In general, the existence of a high degree of structural differentiation between the
subparts of any system acts as a barrier to the formation of social networks within the system. This is because differentiation and organizational specialization results in the acquisition or perpetuation of heterogeneous perspectives, goals, treatment strategies, etc., within the same system. For example, a crisis intervention agency which operates with a human services approach to service delivery might hesitate to refer clients to an outpatient clinic for more long-term psychotherapy and vice versa, due to the ideological discrepancies between the two agencies. Hence, a high degree of differentiation and component specialization has the potential to produce isolation of effort among agencies.

This, in fact, is well illustrated in the remarks of a Crisis Center staff member which were made in reference to the Center's relationship with another drug agency, also a component of the Greene County mental health system:

But there are some real differences in our programs and philosophies, especially in the way we approach dealing with people. Like Encounter is very Gestalt and encounter-oriented, kind of get-in-touch-with-the-feelings oriented. But the Crisis Center works with a basic kind of crisis intervention model which is a self-help model to get the person to develop a method to cope, as opposed to getting in touch with feelings. Our approach is a more reality-oriented thing, rather than creating our own little separate social structure. We have only made a few referrals to Encounter because of these differences in philosophy, and I think only one really worked out. I think it's just that the nature of our programs are so different.

The lack of interaction between these two drug agencies was not unique, rather it was typical of the relationships between most system components. Further indication of the lack of network linkages or relationships between system components in meeting demands in Time One is found in the overall absence of exchanges or interactions of any kind between the components of the established system. Not only were client referrals rarely made between the agencies, but, in addition, agencies rarely exchanged information regarding either individual clients or organizational activities. For example, one 648 staff member described the relationships between the components of the system in the following way:

The agencies have never been very cooperative. Everybody stayed on their own turf. Senior Citizens don't want to be involved with the rest of the agencies in mental health because mental health scares them.
Encounter Program did not cooperate with any of the rest of the agencies, so we cut a psychologist consultant out of their budget so that they would refer their people to the psychologists at the Guidance Center. They didn't make any referrals to one another. None of them did. Very seldom. Once in a while they made some, but it's not a set kind of pattern. They didn't argue with one another, but, you know, "just sort of leave me alone, and I'll leave you alone. We won't invade each other's territory."

Thus, as indicated by the above remarks, the activities and decisions of the subunits of the established mental health system in Xenia were not highly integrated prior to the disaster. To be certain, as in any system, the behavior of the components was to some degree interdependent: they were all in competition for scarce resources, and they were all subject to the same supraorganizational functions exercised by the 648 Board. However, as far as the system's ongoing behavior was concerned, it did not operate in a highly integrated and interconnected fashion. Very few clients crossed organizational boundaries, and there were almost no network relationships or bonds between the components of the system. Subsequently, as would be expected, when the disaster occurred, the system responded in a fragmented way. The relative absence of social networks within the system in Time One served as a barrier to a rapid and unified response by the established system in Time Two. Most of the contract agencies did not respond in any way after the tornado, continuing to operate in their usual specialized domains. Others, like the Guidance Center and Crisis Center, attempted to carve out new domains. The overall effect of such a fragmented response was to prevent the system from being able to mobilize with any degree of speed even its Time One capabilities, much less to generate added or different capabilities.

To summarize, certain internal structural aspects of the established mental health system, i.e., the division of labor, authority patterns, and the kinds of social networks which existed, prevented it from being able to alter its capabilities to meet the changing demands created by the disaster. The fact that the system was a poorly integrated one affected its ability to mobilize quickly the capabilities it did have. Even so, these capabilities were by and large not those which were needed by disaster victims. Furthermore, the high degree of specialization reflected by the service delivering components, along with the pattern of authority which existed, did not facilitate the making of major adaptations in service priorities by established system components in the wake of the disaster. No system is indefinitely plastic, since any social system operates under constraints of both a structural and a cultural nature. Whether or not adaptations could be made to meet disaster generated demands therefore depended
not only upon the intersystemic dimensions just discussed, but also upon the microenvironmental setting - or the framework of norms, values, and beliefs - within which the system functioned. Our analysis now turns to an examination of these latter factors to demonstrate how these conditions influenced the behavior of the established mental health system in relation to the disaster.

Microenvironmental Setting

Just as there were macro or external cultural conditions affecting the response of the established mental health delivery system in Time Two in Xenia, there were also specific norms operative within the system as to what should be done, certain value priorities regarding what was worthwhile doing, and particular beliefs as to what could be done. These sets of norms, values and beliefs constituted the subculture or the "blueprint for behavior" (Linton, 1936: 26) within which the established delivery system functioned. Such factors, whether general or circumstantial, as numerous anthropological and other studies have frequently shown, indicate expected, desirable and possible courses of action. That is, they made up the guidelines by which the mental health system regulated its behavior, specifying what should and should not be done by various kinds of social actors in various kinds of situations.

In the Xenia situation, the effect of the subcultural pattern or microenvironmental setting of the system's behavior differed however from the macroenvironmental setting in two ways. As noted earlier, the macroenvironmental setting already considered is not unique to any one mental health delivery system in the United Stated but includes broad factors or forces affecting any system which shares similar goals and operates within similar socio-cultural areas. By contrast, the microenvironmental setting is more specific to the given system which it embraces. The constellation of norms, values and beliefs prevailing at a given time within a particular system is therefore the outcome of distinctive socio-historical contexts. As a result, it is to be anticipated that there are likely to be certain subcultural differences between different mental health delivery systems. As a matter of fact, the pattern of norms, values and beliefs operative in the established mental health delivery system in Xenia was in some ways relatively unique and not necessarily identical to the subcultures involved in other mental health delivery systems elsewhere.

Furthermore, certain aspects of the macroenvironmental setting were in conflict with microenvironmental conditions. In the earlier discussion it was noted that external cultural factors supported the
overall definition that in the wake of the disaster, both increased and different kinds of demands for mental health services should be anticipated. However, the normative expectations, the value priorities, and beliefs within the established system all served to deter the system from modifying its capabilities so as to meet the changes in demands produced by the disaster. Because these endogenous cultural conditions were such as to prevent the established system from mustering the capabilities required to respond to the changes in demands, the stage was set for the emergence of a new mental health delivery system.

**Normative Expectations**

The normative expectations operating in the Time Two period clearly worked against the development of any new courses of action by the established system to meet the mental health needs and demands of disaster victims. They did so in two ways, one more implicitly and the other more explicitly. First, there were absolutely no norms or expectations whatsoever about what, if anything, should be done. The established system in Xenia not only did not have a disaster plan, but no thought had ever been given prior to the tornado impact as to what might be done in a novel or unusual situation such as a massive disaster. In other words, there were no prior norms, either of a latent or of a projected nature, that the system should respond in any way in such kinds of situations. Implicitly at least, it is easy to see that if there were any expectations with regard to disasters, these were that there should be no response by the mental health system. To be sure, as indicated earlier, in Time Two some of the personnel within the established delivery system did define the situation as one in which there would probably be mental health demands and therefore that there would be a possible role for the mental health sector to perform. But this occurred after the tornado and only among selected system components; it was not a Time One carryover. Moreover, as already noted, there was no real conception within the system as to what in more specific terms might actually be done by way of mobilizing resources or otherwise changing the capability of the system. In other words, there was relatively a clearer expectation that there would be changes in mental health demands than there was an image of the kinds of services which should be provided if the capabilities of the system were to be changed in some way.

Even more important, there were explicit norms within the established system which actually discouraged the development of expectations of new courses of action or their actual implementation by way of new services. As a result of major changes taking place in the system, there were other kinds of existing plans, very elaborate ones
in fact, which specified that the system should develop in particular ways. As described earlier, the established mental health delivery system in Xenia was in the process of becoming a more integrated and more comprehensive service network. Some of the consequences of this planning have already been indicated. The existence of the new service plan, a written, frequently discussed and debated one, made both the 648 staff and Board and the component agencies of the system reluctant to venture too far in thinking about or implementing other new and different services in relation to the disaster. As a matter of fact, to some extent the disaster was viewed as an unfortunate interruption in these and other and more important changes which were taking place in the established system.

This can be seen in several ways. For example, the 648 Board held its first formal meeting about three weeks after the tornado hit Xenia. For many Board members this was the first time that they learned of the various decisions and actions already taken by the 648 staff in responding to the tornado. Some of the Board's actions and discussions at this meeting were sharply at variance with the pressure that the established mental health delivery system was under from outside groups and other systems immediately after the disaster. In other words, the internal dynamics of the policy and decision-making core of the established system generated counterpressures to those being brought to bear on the system from outside. For instance, board members suggested that there was a danger in becoming too tied to disaster-related activities; in fact, many thought that such an emphasis might threaten the effective overall delivery of mental health services in the Xenia area. It was observed at the meeting that the system was in the process of making rather extensive and major revisions of its pattern of service delivery in the area. Some Board members voiced the view that the tornado threatened to turn attention away from these considerations; the opinion was expressed that the system should adhere to its long run plan instead of making temporary adjustments to disaster-generated problems.

Other reactions by the 648 Board, reflecting its expectations about the system response, reinforced the norm that the system should not really be responding to the disaster and that changes in capabilities should be instituted with caution, if at all. Another target of criticism at the meeting was the use of paraprofessionals by one of the 648-funded emergent groups, the Disaster Follow-Up Group. In the opinion of some Board members, persons with very little or no formal training in mental health were not only unable to treat persons with mental health problems, but it is probable in many instances they could not even identify people who needed treatment. This criticism and the previous one did not encourage innovation on the part of the 648 staff, and supported the preferences of many that to venture into providing new and special types of services was not the course of action which should be followed.
This perception was further reinforced by the great concern a few Board members expressed over the actions of the 648 staff. This concern, however, was not over actions which the staff may have been accused of failing to take, such as providing coordination and leadership for an immediate disaster response, but for actions which they did take. Specifically, the staff was reprimanded by at least part of the Board for instituting programs for which money had not been officially authorized and for acting without Board approval. Although the majority of the Board supported most of the actions of the staff, the incident did have the effect of making accountability a much more explicit concern than it had been in previous months. In some respects, the Board reaction came close to being a negative sanction for deviations from established expectations.

By and large, the Board's reactions to the early actions taken by the 648 staff in relation to the disaster were negative. The 648 staff clearly perceived that any future attempts to generate special disaster-related services would be viewed as inappropriate by the majority of the Board. The effect which this had on the response of the established system to the disaster is reflected in the following remarks made by one 648 staff member:

After that meeting, most of the staff went back to planning and operating in a more normal manner, except for the training officer who was involved with the different training sessions. And the Board, well, I guess some of them had the general feeling that we shouldn't have even bothered with the disaster at all. They just didn't see that the mental health system had a meaningful role it could play in relation to the tornado.

In other words, the internal norms of the established system clearly presented a different blueprint for action from that which was being advanced by federal, state and other extra-local groups. Overall, the normative expectations within the system were such as to strongly discourage any moves in the direction of changing the service capabilities of the established mental health delivery system so as to be able to meet the new demands presented by the disaster situation.

Value Priorities

The specific norms operative in the Xenia system were also congruent with prevailing cultural value priorities within the system. That is, certain activities were viewed as more desirable, or as more
worthwhile or appropriate, than others. Put very briefly, as will be shown, the general view prevailed in the established system that resources should not be diverted away from existing programs, and that existing non-disaster-related mental health problems deserved the system's attention. To the extent that there might be disaster generated mental health related problems, the projected normal growth of the established system was seen as providing whatever additional capability was needed to handle the possible changes in demands which might occur as a result of the disaster. Viewed in this perspective, disaster problems and new disaster oriented mental health programs did not warrant any priority of attention or effort.

Important in understanding a mental health system's adaptive potential is the hierarchy of priorities which exists for various tasks or services in the system. A particular system may have the potential to deliver a multiplicity of diverse services through its existing components. However, in its actual day-to-day operations, certain types of services are likely to receive more emphasis than others. To the extent that this is the case, the overall capability of the mental health system to provide particular types of services is greater than it is to deliver others. While the hierarchical ordering of the service network may be the result of a variety of factors, such as client demands, the preferred ideology of treatment, pressure from various interest groups, etc., the consequences of this are what are important. That is, the establishment of service priorities either formally or informally manifests itself in the allocation of discrepant resources among the service agencies. Although this may be highly functional for the delivery system on a routine basis, a major flux in demands for service may render the Time One priorities irrelevant.

It is necessary to examine more specifically how the service priorities of the Greene County system affected its adaptive potential. Since our previous discussion has implicitly dealt with this, it will be sufficient here to emphasize only those factors which were directly related to the system's disaster response. A good indicator of service priorities is the amount of resources, i.e., personnel, materials, funding, etc., routinely invested in the various service programs.

For example, utilizing financial resources as a measure, the data reveal that at the time of the tornado at least 50 percent of the total resources of the delivery system were allotted to one agency - the Guidance Center. Of the remaining half of the financial resources, approximately 20 percent were allocated to Encounter. Using this indicator, an overall picture of the service priorities of the mental health system prior to the disaster can be gleaned. It is fairly evident that the established system was geared mostly toward providing individual or group psychotherapy, which is performed in the clinic rather than in the community, with an emphasis on the treatment of psychopathology rather than on prevention. In short, the system was
predominated by a more traditional medical model of treatment, rather than a community mental health or human services strategy. To a considerable extent this was implicit rather than explicit, but if what is valued can be measured by the proportionate amount of resources used to reach certain ends, then it is clear where the priorities were when the tornado hit Xenia, irrespective of what future plans may have had as a goal.

Thus, to the extent that this was the overall service priority in Time One, the capability of the system to deliver more diverse human social services in Time Two was low. Furthermore, due to the lesser amount of resources, i.e., personnel, materials, funding, etc., invested in the human service programs, the adaptive potential of those agencies with such services was relatively limited. In fact, the Crisis Center, the one agency which most effectively responded in the emergency period to the flux in demands, was able to do this in part because it had a corps of 25 trained unpaid volunteers. This fact served to bolster its standby capability to respond to the increased demands for certain kinds of services produced by the disaster. But the established system as a whole, given its value priorities, could not so readily change its general capability.

In addition, even if service programs could have easily changed, key components of the established delivery system, were unwilling to assign disaster generated mental health problems much priority. In part, this was because it was believed by some personnel in important decision-making positions that there were no immediate mental health problems which were directly attributable to the disaster. As one important 648 staff member said:

I guess I had the conviction that nothing at the moment was going to happen to people because they had too many other things to keep them occupied. And, gee whiz, they didn't have time to have an emotional breakdown. They had to find a place to live or fix up their homes, get clothes and see if their family and neighbors were OK, and things like that.

Given such a kind of perception it was obvious the established mental health delivery system should continue to deal with the existing non-disaster related mental health problems which it had attended to in Time One. A diversion of resources would not only be meaningless but dysfunctional, since the system would be reducing the delivery of necessary services in order to offer services for non-existent needs.

Furthermore, even a lower priority was assigned to the idea of preparing special disaster-related services for potential long run problems. Among some mental health personnel, it was speculated that disaster generated mental health problems might surface in victims six
months to a year after the disaster. However, the view in the established mental health delivery system was that such conceivable clients of the system could be handled by the existing programs offered by components of the established system. This attitude was reinforced by the fact that the services projected in the developing master plan for the mental health delivery system in Xenia were perceived as functional for such problems as might appear in the long-run. Thus, no great value was placed on changing the capabilities of the established system to either deal with short or long-run disaster-generated mental health problems. In other words, the thinking was that the most appropriate way to meet possible accelerations in demands for disaster-related services was to build the general service capability of the established system. The implementation of an already Time One-planned new community mental health delivery system was perceived as a more viable way of dealing with the possible problem, rather than by continuing or adding any more temporary groups or special projects.

Belief Assumptions

Apart from norms and values which prescribe appropriate standards of organized action, cultural specifications also include beliefs which spell out what can be done by a particular system in a particular situation. As a result of its socio-historical evolution, the Greene County mental health system operated with certain beliefs about both the types of services it could deliver and those which it could not provide. The assumptions involved were many, but for our purposes two aspects are important for they served to limit and constrain the types of actions taken by the system in relation to the disaster. First, and a factually accurate assumption, was that the Greene County mental health delivery system, while well developed compared with many other systems in Ohio, did not have a broad range of mental health services at the time of the tornado. Basically the entire loose network of services consisted of outpatient services, drug services, very limited aftercare, extremely limited emergency psychiatric services, a few activities for the aged, and a mental retardation service. To be sure, most of the gaps and looseness in the service delivery network had been recognized by the 648 Board in Time One. In fact, as already noted, planning was underway to render the network more complete and better linked when the tornado hit. It is quite significant that those services which later emerged as the most crucial in dealing with disaster victims were notably absent from the pre-disaster service network, i.e., crisis intervention, emergency services, preventive mental health programs, and outreach services. In short, as a whole the existing mental health delivery system was not a comprehensive one, and it lacked the very types of community-based services which came to be
seen as demanded in the situation. The lack of even the rudiments of such services in the existing system, coupled with the absence of a wide range of other human service facilities and networks, led therefore to a belief among local mental health officials that what was needed was not what was immediately available.

Furthermore, it was assumed by the 648 Board that to increase the system's capabilities in such a direction would require an impossible reorganization of the system and its components. Actually given the prevailing beliefs within the system, some of the 648 agencies were simply unable to conceive of any new disaster related mental health services which their organizations could institute. Still other components, while projecting the need for certain kinds of new services, could not see how their own organizations could possibly change enough to provide these services. A contract agency staff member very aptly described many of the services which eventually did come to be provided, but indicated that she could not see how her own organization could possibly take on such tasks.

After the disaster I thought some other programs needed to be set up which might provide some loosely defined mental health services to people who might be experiencing normal emotional stress, but to offer it in such a way as it's not defined, as mental health help to emotionally disturbed people or something of this nature. But it would be reaching out to people, rather than waiting for them to make contact for the service. It would be providing all kinds of things, like helping them find housing, helping them move, helping them locate other types of assistance, seeing that these people were referred to the right agencies...We would have had to have changed our total operations, so we just couldn't offer that kind of an effort.

Thus, in general it was believed that the established mental health delivery system not only had not previously delivered the kinds of services now needed in relation to the disaster, but that it could not make the changes to do so. In particular, to the extent that the demands made on the established system in Time Two were perceived as non-standard - i.e., calling for qualitatively different kinds of services - an alteration of system capability was difficult to visualize. Neither the necessary technology nor the social organizational supra-structure existed in the established system to facilitate such an adaptation. The implication that new components should be created was of course obvious. However, for a variety of other reasons the 648 Board and staff hesitated to commit too many resources to the establishment of unplanned new services. Among other things, they did not want to jeopardize the development of the previously planned new
service network. In part, this latter factor also accounts for the uneven and uncoordinated emergence of the components which did deliver disaster generated mental health related services.

Taken all together, therefore the internal cultural factors were important influences on the behavior of the established system after the impact. To recapitulate briefly: the particular combination of expectations, priorities, and assumptions prevailing in the established mental health delivery system in Xenia worked against its making changes in its capabilities in response to the disaster. The endogenous norms actively discouraged the system from responding in any way to the disaster, much less moving to altering its capabilities to meet any new demands. The existing priorities in the system downplayed attention to disaster-related mental health problems and the specific types of new services necessary to deal with such problems. Finally, it was not believed that the established system could make the adjustments necessary to alter its capabilities to meet the perceived changes in demands evoked by the tornado.

However, while the established mental health system might, and in this case did, fail to adjust its capability, the demands in the situation in one sense were less flexible. They continued to act as pressure on the system. They strongly encouraged and facilitated the emergence of new mental health components with new domains, and these eventually coalesced into a relatively bounded social entity, or new delivery system. Given the inflexibility of the established system to adapt to the changing demands, the emergence of an entirely new, more flexible, and less bounded collectivity was, therefore, almost inevitable.

To summarize, so far in this chapter a separation had been maintained between six major sets of conditions or factors which influenced the established mental health system in Xenia in its attempt to adjust to the tornado. However, the separation was an analytical one, made primarily for expositional purposes. Of course all the conditions discussed were simultaneously operative, although not necessarily having equivalent weight in the dynamic process. Furthermore, in principle, the factors discussed may not only interact with one another, but they also can either reinforce or neutralize other developing or existing tendencies. In Xenia, there was both reinforcement and neutralization. Consequently, our analysis now turns to a brief examination of the interplay between the major sets of factors and how this led to feedback influencing what existed and what was developing.
Feedback and Interplay

Social systems behave through engaging in actions of some kind. These actions may manifest themselves either in something very concrete or material such as products, or they may be in the form of less material outcomes such as services. Whatever the system outputs are, they tend to evoke feedback of some kind. As Buckley notes "The concept of feedback has now been vulgarized, and is very often equated simply with any reciprocal interaction between variables" (1967: 52). For our purposes, following Buckley's lead, the term has reference to a process whereby a system senses certain selected aspects of its environment, takes such cues, matches them with general system objectives, and attempts to adjust behavior accordingly. Additionally, the feedback may be positive or negative. There is considerable ambiguity and lack of consistency in usages of these terms in the literature. Again, simplifying for purposes of this study, the term negative feedback is used to signify a process whereby a system is informed that its actions are deviating from its general objectives. The term positive feedback is used in this study to refer to inputs signaling the system that its behavior should continue, although as Buckley observes the referent is sometimes associated with actions that "increase the deviation of the system from its goal-states or criterion limits" (1967: 53). 7

Whatever the particular terminology, a major point of this study is that the established mental health delivery system in Xenia through its actions in Time Two elicited incoming cues that its behavior was not achieving the objective of providing mental health related services to the victims of the tornado. More important, this negative feedback while initially reinforcing the system's efforts to adjust, eventually led to an abandonment of any effort to provide disaster related services directly. No system is indefinitely plastic. There are limits to the adaptability of systems to negative feedback; in Xenia the eventually cessation of effort by the established mental health delivery system to meet the changes in demands was a case in point of this principle.

In one respect, this marked a full circle for the established system. Inaction had been the initial response right after the tornado hit. This inaction brought a reaction by the federal and state mental health systems, elements in the environment with which the system had a relationship. Even though they exercised no direct supervision over the established system these elements communicated the message or information that an absence of response was inappropriate. Essentially they provided negative feedback to the established system indicating that it should do something the exact nature of which was left somewhat unclear.
Then the established system not only received cues to do something, but was even provided resources to gear up to deliver clinically based services. This occurred when neighboring mental health delivery systems, primarily from the Dayton area, provided most of the personnel to man the Three Stage Plan. In other words, the established system received negative feedback on trying to adjust to the tornado by simply extending or continuing its everyday mental health services. The consequence was the development of the Three Stage Plan, with its implicit medical model and assumption that there would be demands for clinically based services to deal with more serious mental health problems.

Then the established mental health delivery system received further negative feedback. The potential or supposed users of the services being offered through the Three State Plan did not materialize. Almost no use was made of the proffered services. Again this was an indication that the established system was not achieving its objectives of providing relevant services.

Stating what happened in the unqualified and stark terms as just done, does of course some violence to the empirical reality. But it is not a distortion of the basic processes operative or the general tenor of what happened. Neither is it a distortion in that same sense to state, as will now be discussed, that all that happened was the result of the interplay of the internal and external socio-cultural conditions affecting the demand-capability ratio of the established system in Xenia in Time Two.

The established system's internal norms, values and beliefs as well as its structural arrangements and aspects were consistent with a medical service delivery model. Thus, the system was bent in that direction, given the external factors operative in the situation. These factors included cultural norms, values and beliefs which supported the idea that provision of mental health services at times of disasters was something that should be done, was worthwhile doing and could be done; additionally, the links of the focal system with others had some impact in making for a new behavioral pattern to meet the supposed changes in demands. But the demands were not there in any recognizable way. However, the internal conditions in the established system prevented any further adaptation. They essentially acted as constraints on the bringing about of any other changes in capability. Yet, the external factors on the other hand continued to push for some kind of delivery of services. Caught between internal constraints and external pressures, the established system after its abortive involvement in the Three Stage Plan abandoned any effort to provide disaster related mental health services.

The continuing demands were enough however to generate a new delivery system. In contrast to the established one, the emergent system received positive rather than negative feedback. There were
two major sources of feedback. Unlike those in the established system, the components of the emergent mental health delivery system had close links or ties to peripheral elements and the human and social service systems in the area. These systems which were also strongly connected to one another helped the emergent system to develop in the direction it did by providing positive feedback. They signaled the emergent system that it was filling in gaps and meeting needs for mental health related services on the part of disaster victims, mostly having to do with problems in living. Equally as important the emergent system received positive feedback from the users of the services. There were users, they seemed to benefit from the services, and there were indications or signs that additional users for the services might be found if the services could be provided. All this strongly reinforced the continuation of the behavior of the emergent system. In one sense, it was involved in a "feedback loop" (Buckley, 1967: 70); the more its output the more it received positive input which produced more output, etc.

In essence, the emergent mental health delivery system was more influenced by the immediate or local setting in which it operated, whereas the established system was more responsive to its larger framework, that is the macroenvironmental setting and the inter-systemic dimensions. This is consistent with the view expressed of such matters by Osborne and Hunt (1974). However, it also follows that in future disasters, since the broader aspects are likely to be operative everywhere, that which occurred in Xenia is likely to recur elsewhere when an established mental health delivery system might find itself in a similar situation.

To summarize, this chapter has presented an analysis of the conditions which made it impossible for the established mental health delivery system to respond to the disaster, and allowed the development of a new emergent delivery system. The explanation advanced focused on different internal and external influences on the demand-capability ratio of the established system, and on the differential effects of feedback processes in producing a particular kind of new system. Various implications of the observations and findings made will now be indicated.
Footnotes

1. It is rarely the case that major changes which have no precedence in the pre-disaster organizational or system patterns or activities are implemented. In one DRC study of four local hospitals involved in a major flood catastrophe, most of the short-term adaptations and long-run changes following the disaster could be traced to organizational and systemic factors existing in Time One in that community. The seeds of change were present, ready to flower through the flood. Consequently, it seems necessary to take preconditions into account even when looking at new social phenomena in the Time Two period after disasters.

2. The concept of interplay is discussed in the last part of this chapter.


4. The county commissioners appointed the rest of the 648 Board, but apart from this function, they exercised only nominal influence and power over the mental health system.

5. This overall perception may not have been altogether inaccurate since at least some of the outside personnel did believe that there were going to be quantitative and qualitative changes in demand on the mental health system. There is also reason to suspect, although it would be difficult to document, that some of the more sophisticated mental health personnel from outside the mental health system in Xenia may have deliberately overstated what they thought was going to develop by way of needs and demands, so as to spur the resisting local personnel into action.

6. Technically it would be more accurate to refer to the "sub-culture" of the nature of the mental health delivery system in Xenia. However, since there is not that much standardization of the term, the more generic label of "culture" will be used in the discussion and analysis.

7. In fact, Mowrer notes that certain usages of the concept of positive feedback make it appear in the instance of living systems as if it were "pathological to say the least, and, in the extreme case, lethal" (see the reprint of Mowrer in Buckley, 1968: 340).
CHAPTER VI

CONCLUSION AND IMPLICATIONS

This final chapter begins by recapitulating the objectives and procedures of the study and briefly summarizing our major observations and findings. The discussion then turns to a more general level, indicating some of the most significant implications of what was found and suggesting prospects for future research which would build on the findings of our study.

Objectives and Procedures

Disasters occur frequently in American society, but only a small number of them have been selectively studied. On April 3, 1974, a tornado hit Xenia, Ohio, and research was initiated by the Disaster Research Center (DRC) on several aspects of the disaster. However, two things happened in the wake of this particular catastrophic event which made it rather unusual compared to most others which had occurred up to that time. First, a major organized effort was made to attempt to provide mental health services on a large-scale to both direct and indirect victims of the disaster. Although scattered attempts to deliver similar kinds of services have followed in the aftermath of other American disasters beginning in the early 1970's, the effort in Xenia was almost certainly the most elaborate, organized and deliberately conceived of any ever launched. The second unusual post-impact aspect of the disaster was that for the first time ever, a systematic study was made of the organized effort involved in the delivery of these services. Concurrent with the attempt to provide mental health services, research was being conducted by DRC on that and other disaster problems. The study reported in the previous pages is a part of that much larger research endeavor. It was intended to be an exploratory case study of the effort to deliver mental health services in the wake of the Xenia tornado.

The initial starting point of this research was that the effort to provide mental health services in relation to the disaster involved the response of an emergent social system. Early field observations had clearly established the fact that the mental health delivery system existing in Xenia prior to the tornado had not generally provided mental health services after the tornado. Instead, a new delivery system for that purpose had come into being. From this initial starting point the research had as its objectives: 1) describing the basic characteristics of the emergent mental health delivery system which came into being; and 2) analyzing the conditions which accounted for its...
emergence and the particular features the new system manifested when it evolved.

To develop this description and analysis a variety of data sources were tapped. The greatest reliance was placed on a series of open-ended, in-depth interviews, about 300 in number, conducted with almost all of the key participants involved in mental health and related activities in the Xenia area. This data source was supplemented by the gathering of several hundred documents, mental health related statistical measures and indici, participant observations, and a mailed questionnaire conducted among mental health volunteers. Overall, both the quantity and quality of the data were within acceptable limits of reliability and validity, given the objectives of the study. A qualitative analytical procedure was generally used to examine the data, although a few quantitative measures were employed when relevant and available.

The analysis undertaken depended heavily on the bringing together of conceptual ideas from the sociological subspecialty of collective behavior, and general systems theory which, while increasingly used in sociology, has its intellectual roots elsewhere. These ideas were employed both to organize the data gathering and the analysis undertaken. The key notion was that the emergent phenomena which represented an instance of collective behavior could be viewed as the outcome of the failure of an existing open system to respond well to a major stress event. Or stated in other words, the emergent mental health delivery system in Xenia was postulated as coming out of and being spawned by the established mental health delivery system which could not adjust or adapt to the exigencies created for it by the tornado.

Observations and Findings

The analysis began by examining the larger socio-cultural contexts influencing the development of the system which existed in Xenia for delivering mental health services prior to the tornado. As a result of those contexts, it was found that the system had evolved a particular constellation of characteristics. That is, there existed a bounded set of components operating in a domain which in some sense clearly distinguished it as the overall entity or system for delivering mental health services in the community. Furthermore, this constellation had evolved and was still in the process of evolving a set of capabilities manifested in the components and domain of the system—which more or less met a particular range of demands for services in the area.

However, this relatively balanced demand-capability ratio was disturbed by the disaster. When the tornado struck, it generated two kinds of post-impact socio-cultural conditions affecting the demand-capability ratio within which the established system functioned. The
system had to adapt and adjust to that unbalanced ratio and it was unable to do so.

The first set of conditions affecting the system's behavior were external factors originating outside its boundaries. The actions of several groups and organizations, many from outside the local community, along with other exogenous cultural factors, led to a perceptual definition within the established system that there would be a change in demands for mental health services as a result of the disaster. The definitional perception of the situation being advanced indicated that there was going to be both a quantitative increase in demands for services as well as a qualitative change in the kinds of mental health services which would need to be met by the established system.

In the face of these expected changes in demands, the system could have reacted in several ways. In fact, as was shown, the system made an initial attempt to respond by mobilizing a large-scale effort to deliver its traditional kinds of more clinically-based services. This effort was a total failure, particularly because there were no demands for such services. But, in the face of a continuing definition that there were going to be other and different kinds of mental health related problems which would have to be met, the system was unable to change its capabilities to meet these demands.

This inability to change was found to be related to the second set of socio-cultural conditions affecting the response of the system, i.e., its own internal dynamics. In effect, the ongoing system for delivering mental health services simply could not meet the anticipated changes in disaster-related demands for services through its existing capabilities. Furthermore, the system was unable to mobilize new and different capabilities. The consequence, given the continuing demand, was the emergence of a new system to deliver mental health related services to disaster victims. This system evolved a new demand-capability ratio distinctive from that of the established system.

The analysis additionally showed that the external or exogenous conditions affecting the behavior of the established system could be analytically broken down into intersystemic factors and the macro-environmental setting. The former had reference to the different kinds of relationships which the focal system, the established mental health delivery system, had to other social units in its environment. Among important dimensions were the division of labor, the authority patterns and the social networks which existed. The macroenvironmental setting involved the larger cultural norms, values and beliefs outside of the focal system which were important influences on the response of the system. The internal or endogenous conditions were also divided into intrasystemic factors and the microenvironmental setting, the basic nature of which were similar to the intersystemic and the macroenvironment-
mental setting, except that they operated within, rather than outside, the established mental health delivery system in Xenia.

Additionally, it was observed that the emergent mental health delivery system had a different set of interacting components, developed an identifiable area of operations or a distinguishable domain, and acted, in some sense, as a bounded unit or a totally separate entity apart from the established mental health delivery system which in the meantime continued to function in providing non-disaster related services. The specific characteristics manifested by this emergent system, as shown, were the result of the feedback from the interplay between the internal dynamics of the established system and external factors impinging on it after the disaster. The existing system could not respond to the negative feedback it was receiving and eventually ceased to attempt to adapt. At the same time, the positive feedback to the emergent system led it to continue to develop in the direction in which it was moving.

Some Implications

What then are the more important implications of the observations and findings which are the results of the study? Some of these will now be briefly delineated. Omitted will be major inferences which could be made regarding the more practical matters involved in any future attempt to provide mental health related services following other disasters. Instead the discussion here will confine itself primarily to some major contributions made by the study to the field of collective behavior and to the general or open systems perspective, the two theoretical formulations which informed the work and directed our efforts. In a number of cases, this study provides empirical support for speculations and suggestions previously advanced in the literature; in a few instances, new directions for research and theory seem indicated by the data grounded observations and findings made.

However, before proceeding to an exposition of the study's implications, perhaps one of the most significant contributions of the research should first be noted. The study demonstrates that the general or open systems perspective can be applied to actual collective behavior phenomena. While both Buckley (1967) and Klapp (1972; 1975) have recently suggested the fruitfulness of such a convergence, as far as can be ascertained, no full scale empirical attempt had actually been undertaken until the present study was initiated. Thus, whatever the other merits or lack of merits of this research, it does represent the first actual attempt to implement what up to now had merely been advocated.
Supported also by this study is the point of view expressed by those who argue against an either-or distinction between collective behavior and institutionalized behavior. These include orthodox symbolic interactionists who take the position that even traditional group behavior which is undertaken in bureaucratic settings is always being "negotiated" and thus, in some sense, is always emergent (Strauss et al., 1964).

There are also those in the collective behavior area who have pointed out that no instance of collective behavior is completely emergent, but partakes of whatever institutionalized patterns previously exist (Turner, 1964; Dynes and Quarantelli, 1968; Weller and Quarantelli, 1973; Quarantelli and Taylor, 1975). Such a point of view might appear obvious. However, it has not been the standard stance taken in the field of collective behavior, itself, as can be witnessed in a recent restatement of the old distinctions by Pfautz (1975: 19). Furthermore, the possible collapsing of the distinctions between the two classes of social phenomena - collective and institutionalized behavior - has all but been ignored by social organizational and system specialists as Zald and Ash have noted (1966: 328-329).

This study has indicated the probable usefulness of dropping the frequently postulated dichotomy and treating both classes of behavior as being generically the same without, on the other hand, denying some secondary differences between the two phenomena. This would seem to follow from a meaningful treatment of emergent phenomena with an open systems perspective as was done in this study.

In addition, our study is supportive of those who believe that social behavior should not only be identified in social terms, but needs also to be explained by other social level phenomena (Durkheim, 1938). While this position is frequently advocated in sociology generally, only in recent years has the same orientation been argued for collective behavior phenomena (Marx and Wood, 1975: 365-368).

The analysis undertaken in this study tried consistently to account for the emergence of an instance of collective behavior, the new disaster-related mental health delivery system in Xenia, as stemming from other social level factors, i.e., the sociocultural conditions discussed. To the extent that the analysis was successful, it supports the position of those who believe that collective behavior phenomena should not only be identified, but also explained at a social organizational level (Weller and Quarantelli, 1973).

Another implication of this study is that several different kinds of social processes which are usually treated as disparate can be captured within the same general framework. This is, bringing together a collective behavior and the open systems perspective allows, because of the synthesis, a concurrent and common analysis of some phenomena frequently thought of as belonging in different spheres. In part, this
may be because, as Buckley implies, the open systems and the collective behavior perspectives, unrecognized by most students, have some common theoretical roots (1967: 22). Whatever the reason, our study did bring together in an empirical fashion what some theorists have only speculated about in some of their writings.

For example, the results of our work indicate that those few writers, such as Turner and Killian, who have hypothesized that collective behavior might contribute to social stability as well as to social change (1972: 416-425), might have a valid point. The almost exclusive equating of collective behavior with social change, as exemplified in Tiryakian (1967), is challenged. On the one hand, the analysis undertaken here demonstrated that along one line the collective behavior examined in Xenia did lead to social change, the emergence and at least temporary existence of a new mental health delivery system. On the other hand, the collective behavior which developed also functioned to ensure that the stability of the established mental health delivery system in Xenia would be maintained. While this dual outcome of collective behavior is a complicated issue and hardly settled by the research undertaken, the findings of the present study are not inconsistent with the basic idea that the consequences of collective behavior can be either stability or change, or both.

Certainly our research is supportive of the idea that systems are not self generating, homeostatic, self-equilibrating entities. Rather, all social systems are dynamic and change through collective behavior processes; or, as indicated, they may also resist change through collective behavior. At a very minimum, there was in the study an actual exemplification of the processes of structural elaboration or morphogenesis and of structural maintenance or morphostasis which both Buckley (1967: 136-138) and Turner and Killian (1973) allude to as possible functional outcomes of collective behavior.

Additionally, our analysis brought together with the concepts of contexts and conditions, both the antecedent and immediate factors which influence emergent social behavior. As Berk (1974) and others have noted, there has been a tendency for collective behavior analysis to stress antecedent conditions as if emergent behavior sprang full blown from general structural settings. On the other hand, there has been a tendency in open systems thought to play up the immediate precipitating factors of system behavior. The study undertaken demonstrated that both sets of factors had to be taken into account to understand the emergent delivery system which came into being in Xenia.

Similarly, collective behavior formulations have tended to focus on and deal primarily with conflict types of situations and behaviors, ignoring accommodative phenomena (Quarantelli, 1970b). Systems analysis, to the extent that it stresses equilibrium, homeostasis
and negative feedback is inclined to have a conservative, consensus orientation (Buckley, 1967: 59). However, as shown in the earlier discussion, conflict and consensus can both be simultaneously involved in an emergent process. A concern with only one may miss important aspects of the situation affecting system behavior especially if it is of a developing kind as was the case in Xenia.

Furthermore, our research indicates the need for a balanced approach on another matter also. The collective behavior literature, especially that on social movements (Wilson, 1973: 89-150), has strongly emphasized the role of ideology in directing the developing behavior. However, "ideology and belief systems too frequently are conspicuously absent" in systems analyses (Haas and Drabek, 1973: 92). The examination of both the established and emergent mental health delivery systems in the Xenia situation revealed that ideological and belief factors were influential in affecting the behaviors of both systems; in fact, what happened could not be understood if such factors were ignored.

The analysis undertaken here is also supportive of those (Davis, 1970; Blumer, 1971; Lowry, 1974; Mauss, 1975) who have been trying to develop the notion that all social problems are the outcome of collective behavior processes. Their thesis is that social problems are the result of definitional processes among interest groups. Thus, Mauss, who states that "social movements generate social problems" (1975: xvii) argues that the "illness" interpretation of mental disorders has derived from "those publics and interest groups that have a vested interest in the issue" (1975: 329). In a parallel fashion there were some indications that the definition that there were mental health problems in the aftermath of the Xenia tornado for which services had to be provided, was also the result of collective behavior processes among and between groups with a vested interest in such definition. Certainly nothing in this study was at variance with the idea that collective behavior was and is bringing about a new social problem, in modern society: that mental health needs and demands exist after disasters and that these problems ought to be ameliorated through the organized providing of services.

In fact, the overall findings from our analysis support the frequently advanced idea that the mental health area is threatening to engulf other sectors of life, in particular the social and human service areas which have a longer tradition of existence and greater acceptance in American society. The boundaryless and boundary-busting nature (Dinitz and Beran, 1971) of the mental health area and its encroachment into other spheres of organized life was certainly a noticeable feature of the emergent mental health delivery system which came into being in Xenia. Among other things, it seems certain that this penetration into other spheres is certain - if it has not already done so - to generate questions and disputes about whether the delivery of certain kinds of
more general human services after a disaster, is a proper and legitimate undertaking of self-designated mental health organizations and systems. In fact, as observed in Xenia the established mental health delivery system did resist such a role, although national trends seem clearly to be moving in the opposite direction.

In part, the move in this direction is probably a part of a utopian impulse and vision in American society which pulsates and has recently sharply surfaced again (Gusfield, 1973). When such utopian ideas get married to an activist strain in the social system, the ensuing intercourse results in the eventual birth of a corps of professional reformers ready to move into any seemingly appropriate situation. This, according to some (McCarthy and Zald, 1973), has already happened in many social areas, particularly in the social welfare area (Moynihan, 1969) in American society. It appears to be developing in the disaster area and more recently in the mental health sector. Thus, not only in Xenia but in other disasters, federal, regional and state mental health officials along with other well-known national experts on mental health problems and disaster behavior frequently converge on local communities offering advice and expertise about how to handle disaster generated mental health problems with the spirit of social reformers. By noting the effect which professional reformers had on the changes which occurred in Xenia following the disaster, our study illustrates the kinds of consequences which can result from the growing trend toward the professionalization of reform in American society.

Whether the development of the organized delivery of mental health services in disasters will be totally beneficial for the population supposedly being serviced is an open question. In Xenia, the felicitous phrase "clients come last" (Stanton, 1970) was not totally applicable; but, on the other hand, neither was it completely inappropriate. It is clear that much of what happened in Xenia was done for the benefits of the organizations involved and particularly for the maintenance and survival of the established mental health delivery system. The existing needs of the victim population, whether manifested in demands for services or not, played a part but not always a dominant one in what was attempted and done.

Finally, at another level, this study may have contributed to both collective behavior and open systems theories. For instance, this research has attempted to contribute to the advancement of a new paradigm for the understanding of collective behavior phenomena. There is little question that a new paradigm is necessary. (For a discussion of this see Marx and Wood, 1975.) However, although a number of new formulations have emerged in the past decade all of which challenge the dominant model, the field has been captured by none of these new approaches. In part this is because few of these new models rest on an adequate empirical base.
Elements of the paradigm advanced by this study have been suggested elsewhere (Weller and Quarantelli, 1973; Quarantelli and Taylor, 1975; Quarantelli, Weller and Wenger, forthcoming). The advances made by this study have been in clarifying the central concepts, stuffing them with empirical substance, and indicating some of the major relationships involved. For example, conceptual clarity was given to such sensitizing concepts as contexts, conditions, and characteristics; and specific substance was provided for other concepts such as the demand-capability ratio and socio-cultural conditions. In addition, an effort was made to show the dynamics of the links between the referents of such other concepts as inter- and intra-systemic dimensions and macro- and microenvironmental settings. In the course of such an exposition numerous tentative propositions or hypotheses were implicitly if not explicitly formulated for future testing.

This study may also have made some advances in its attempted reformulations of certain system notions. The dynamic nature of systems, while discussed in the literature, has not been adequately treated nor well studied, especially the emergence of system characteristics. Bogulsway addressed this point in his positing of polar types of established and emergent systems (1965: 7), but how the transition is made from one pole to another is left unstated. Our study described how an emergent system developed out of an established one, and also attempted to account for the change or transition.

In addition, most of the system literature has a somewhat narrow view of the feedback process, equating it, in most cases with information flow (Buckley, 1967: 52-58). Very rarely an attempt is made to distinguish between negative and positive feedback. In the study undertaken, not only was an attempt made to apply negative and positive feedback notions, but the effort was made to broaden the process to include the flow of other resources, in addition to information.

What was accomplished in this study is of course neither definitive nor conclusive, however supportive the data may have been of particular theoretical or conceptual notions, or however suggestive it may have been of new ideas. Much more work remains to be done. Some possible lines of attack are therefore discussed in the next section of this chapter.

**Future Studies**

Given the paucity of studies undertaken so far on the delivery of mental health services in disasters, almost any kind of research done would be of some value. Sheer descriptive accounts as well as works
of a more analytical nature are necessary. However, certain kinds of research undertakings might have more payoff than others. This has reference to both the scope of the projected studies as well as their substantive foci.

It would be highly premature at present to conduct specific, hypothesis testing studies. Some of the simplest factual details are still totally lacking about the range of who does what, where and when with regard to the organized delivery of mental health services in disasters. Consequently, it might be more fruitful to launch some rather broad range research in an attempt to start filling in the panoramic picture of the problem which needs to be known. These efforts should be of two kinds.

One, there is need to do a series of comprehensive studies of the delivery of mental health services in a variety of different disaster circumstances other than the kind examined in our case study. For example, there is reason to believe that certain dimensions of disaster agents affect general responses at both the personal and at the social levels. Dynes points to such characteristics of disaster agents as their frequency, predictability, controlability, cause, speed of onset, length of possible forewarning, duration, scope of impact, and destructive potential (1974: 52-55). If these affect personal, group, organizational and system responses in other areas of life, it is a viable hypothesis, until shown otherwise, that they are of some consequence also in the mental health area.

Second, viewed from another standpoint, there are considerable variations in the social settings and social systems which are impacted by disaster agents. Thus, it was noted very early in Chapter II, that the Xenia tornado struck a relatively small community which had a fairly monopolistic mental health delivery system. The same tornado impacting one of the metropolitan areas in Ohio with pluralistic, if not actually competing, mental health delivery systems would have had a rather different reactive and proactive social setting. Also, some localities are more accustomed to the possibilities of disasters than other areas; many communities of the former kind have in fact been characterized as having disaster subcultures (Wenger and Weller, 1973). Logically, at least, this should make a difference in both mental health needs and demands as well as the actual and potential organizational and system capabilities, although only empirical studies can determine if the probability is an actuality. Then, too, there is the possibility that a disaster might strike a community which has almost no Time One local mental health resources, an actual case in point being Monticello, Indiana, which was hit by the same wave of tornadoes which struck Xenia. (See Zarle, 1975, for a description and analysis of the delivery of services in that particular case.) Since in this type of circumstance the providing of disaster-related mental health services would have to be imported almost totally from outside the local community, there would likely be major differences in the emergent organized
response in such situations compared to that which occurred in Xenia. These possibilities - pluralistic versus monopolistic mental health delivery systems, disaster culture rooted systems, and externally imposed delivery systems - are merely examples of the kinds of variations in situations and systems which should be examined.

Also, two other kinds of comparative studies might have substantial payoffs. The attempt to deliver mental health services in disasters has not only been far more prevalent in the United States than elsewhere, but the effort to do so via a social arrangement or organization of a system nature is also rather culturally distinctive. However, efforts to provide such services, partly as a result of American influences, are now starting to appear in disasters outside of the United States, a case in point being a rather major effort made in Managua, Nicaragua, after the 1973 earthquake (Ahearn, 1976). There is reason to believe that there will be an increase in such attempts. Cross-cultural studies of the delivery of mental health services in disasters should therefore be done; and, if there are enough cases, it might be possible to control for both cross-cultural and system organization influences. Then, too, it would seem worthwhile to examine the similarities and differences between mental health delivery systems in disasters and delivery systems operative in other areas. As a matter of fact, the Disaster Research Center is currently conducting a study of the delivery of emergency medical aid in disasters, a study partly derived from some of our earlier thinking about systems (Taylor, 1974), as well as from ideas generated by the mental health study in Xenia. Such a study is but a start; a series of them ought to be undertaken, particularly to see in what ways, if any, more traditional delivery systems differ from newer ones such as those in the mental health area.

Apart from studies with the just indicated foci, there should be other kinds of research with other substantive foci. This would, of course, be in addition to work which should be done with respect to conceptual clarification and model elaboration. While various matters could become major substantive issues, those associated with the conditions or factors found to be related to the emergence of a new mental health delivery system in Xenia need extensive work and examination.

While the distinctions made between internal and external factors, and between systemic and environmental dimensions seem useful, the substantive contents involved have hardly been explored. Clearly there can be a wide variety of different patterns of relationships between a focal system and others; similarly while certain norms, values, and beliefs may predominate, there may be secondary or even deviant clusters operative. For example, it would seem useful to attempt to ascertain the varying weights of influence of factors such as the division of labor, authority patterns and social networks prevailing in a given
situation. It could be argued, for example, that if authority and power are as crucial in social affairs as the Marxists and other conflict writers indicate, then this factor could be more influential than the division of labor or the social networks which might exist in the situation. Similarly, there are other general cultural clusters besides the dominant ones in American society. For example, while the community mental health ideology may now be the dominant belief system in the mental health area, the formerly dominant medical-psychoanalytical orientation is still widely shared and along certain lines continues to mount an intellectual counterattack (Fisher, Mehr and Truckenbrod, 1974). How these varying factors operate in affecting the delivery of mental health services in disaster situations needs to be examined to a much greater extent than has been done in our exploratory case study.

Among the more important substantive studies which ought to be undertaken in the future might include intensive examinations of the feedback process. While the crucial role of feedback in determining the characteristics of the emergent mental health delivery system was noted in our study, the actual content of the feedback was primarily touched upon rather than examined in detail. In particular, future studies need to address the question of how systems handle inconsistent definitional inputs, a matter perhaps somewhat slighted in the case study undertaken.
Postscript

In conclusion, it might be noted that whether or not the previously proposed research is ever undertaken, it is unlikely to affect the ever greater importance of the mental health sector in American society. The move to extend mental health activities into disasters can be seen as part of what has been called the "security orientation" of American society (Meadows, 1971). This means that increasingly there are attempts to develop:

new powerful engines of risk control into ever-new areas and levels of human and environmental hazards - to the collective hazards of illness, unemployment, emotional disturbances, physical hardship, and so on. Thus, there develops what we may call...an age of massive risk reduction institutions and agencies, public and private, collective and personal. (Meadows, 1971: 63-64).

The new legally mandated delivery of mental health services in disaster can be seen as a reflection of this attempt at risk control in the society.

But interestingly the same author just cited has also observed:

these new measures and mechanisms for reducing risks can and in fact do in time generate new risks of their own. As in all human history, so now problem-solving creates new problems. Indeed, one of the most important aspects of any local community in America today concerns the problems created by its own problem-solving agencies (1971: 64).

The difficulties, disputes and conflicts which developed in Xenia as a result of the effort to provide mental health services after the disaster, perhaps are a reflection of how the attempt to deal with a problem generated many other problems.

Indeed, what occurred in Xenia and probably will occur elsewhere with the passage of the federal law mandating the delivery of mental health related services in future disasters may simply be indicative of a central point about American society which Meadows has phrased as follows:

One way of phrasing all this is to point out that in America security is indeed a dominant value orientation, that the security value has assumed
many new and perhaps as yet many unfamiliar forms, and that the emerging problems of security lie in the frontier circumstance that we do not yet fully understand and therefore cannot yet effectively manage the complexities and intricacies of the relationships of our newly developed security forms and security norms to our over-riding commitment to security as a dominant social value (1971: 64-65).

If this is truly the case, the study reported in the previous pages sheds some light on this larger trend. Very probably this and similar studies will not significantly affect current trends, including manifestations of the security orientation. However, research such as this may contribute to the understanding of the phenomena involved in such trends. In this sense the scientific knowledge acquired could possibly allow societal members to harness and direct such social processes in the future rather than let themselves be buffeted by and subjected to unknown forces as in the past. At least, that is our hope.
Footnotes

1. The drawing of practical implications from this study will be done in other projected writings by the author.

2. The certainty of this statement cannot be absolutely established, but neither Buckley (1967) nor Klapp (1972, 1975) allude to any actual studies and our search of the research literature failed to uncover any clear cut examples.
APPENDIX A

Respondent Interview Guide
Interviewer: Record the following information about respondent (without asking directly).

Sex___ Race_________ Age____ (estimate to closest decade)

Before we discuss the specific activities you were involved in in Xenia after the tornado, perhaps we could start out with your own personal experiences during and immediately after the tornado hit.

1. Where were you when the tornado hit Xenia? If not in Xenia, how did you first find out about the tornado? Probe: A. Specific content and source of information  
B. Respondent's own reactions to information

2. What did you do immediately after the tornado? (If respondent discusses volunteer activities, go to question #4).

3. Do you recall who the first person (or persons) was that you talked with about the tornado? Probe for information that might explain the individual's involvement in mental health activities or volunteer work.

4. What specific types of activities (or volunteer work) did you engage in after the Xenia tornado? 
   Probe: A. Chronology of activities
       1. What major organizations and individuals did you work with?
       2. Major decision-makers and coordinators of activity
   B. Nature of the activity
       1. Who did you offer assistance to? If referrals, what were the sources of referrals?
       2. How did you determine who needed help?
       3. How did you approach people in offering them assistance? How did you identify yourself? Why?
       4. What type of assistance did you offer? If referral, to whom did you refer persons? On the basis of what criteria?
       5. How did people respond to you and/or the assistance and were there changes over time?
   C. How long were you involved in this work?
       1. When did you stop?
       2. Why? (Specific reasons and dates)
   D. Were you a full-time or part-time worker? 
      Paid or volunteer? 
      Probe: Changes over time

5. What kinds of problems did you find that people expressed? 
   Probe: A. Problems people said they had
   B. Problems their behaviors suggested (explicit description of behaviors such as shock and depression)
   C. Changes in time in problems expressed
6. Do these differ from the kinds of problems you encounter in a non-disaster situation insofar as your experience is concerned? How?
   Probe: A. Is it the types of people presenting problems? (e.g., middle class vs. lower class, differences by age, sex, race)
   B. The intensity or severity of the problems?
   C. Nature of the problem?

7. What approaches or strategies did you use in dealing with various types of problems? (i.e., treatment models or techniques)
   Probe: A. Rationale
   B. Exact description of specific activities, such as counseling, just talking to people, referrals, etc.
   C. Uniqueness of strategies to disaster situation?

8. Were there any alternative approaches considered, or being used?
   Probe: A. Content and source
   B. Evaluation

9. How effective do you think your efforts were?
   Probe: What criteria for evaluation, which strategies were most effective?

10. Do you think that the types of problems occasioned by a disaster require different types of approaches than problems expressed in a non-disaster situation? Why? What types of approaches?

11. (NOTE: for strictly mental health workers or those who use the term "mental health.")
    The terms mental health and mental illness are often applied to the area we have discussed. Do you feel these terms are useful? What do you mean by them? What other terms, if any, do you use other than these?

12. From your perspective of community mental health . . .
    (1) Who would be defined as mentally ill and in need of outside help?
    (2) What are some of your most effective strategies in dealing with psychological and emotional problems such as those you mentioned above?
    (3) What kinds of qualifications do you think are necessary to perform these kinds of services?

    Since we are attempting to get an overall picture of the various individuals and groups who were working in the Xenia area, perhaps you could give us an idea of the different types of mental health (or counseling) services offered.

13. As far as you know, what types of services were these agencies providing?
    (1) Crisis Center
    (2) Guidance Center (Xenia and Dayton)
(3) Family Service Association (Xenia and Dayton)
(4) Interfaith
(5) Disaster Follow-up
(6) Golden Age Senior Citizens (Xenia and Dayton)
(7) Antioch Encounter Programs, Inc.
(8) Metropolitan Churches United (Dayton)
(9) 648 Board (Dayton and Xenia)
(10) Red Cross
(11) Ohio Department of Mental Health and Mental Retardation

Probe for each agency:
A. Contact with agencies (nature and frequency)
B. Pre- and post-tornado differences
C. Evaluation of services (criteria)

14. What other organizations, agencies, groups, or individuals are you aware of that were set up to offer mental health related services after the tornado?

15. If respondent is a member of a mental health organization (not clergy), ask the following: (Do not ask 648 Board in Xenia.)
   (1) How much contact does your organization have with the 648 Board in Xenia?
      Probe: A. Frequency
             B. Nature
                1. planning
                2. policy decisions
                3. training and education
                4. advisory
                5. adding resources (personnel, funding, facilities)
                6. supervision and review
             C. Any changes after the tornado

   (2) How would you evaluate the contact you had with them?
      Probe: Try to establish the basis of the evaluation (programs, resources, its personnel)

   (3) As you see it, what is the responsibility of the 648 Board?
      Do you have any formal relationship with the 648 Board?

   (4) What do you know about future plans for mental health services in the Xenia area since the passage of the mental health levy? As far as you know, does this have consequences for your organization?

16. If not mentioned before, did you have contact with any consultants or persons from outside the Xenia area?
   Probe: Nature, evaluation and influence of contact with outside consultants especially attempting to see how personal viewpoint was changed
We would like to learn a little bit more about some of the factors that led you to engage in the activities that you did in Xenia.

17. First, have you had any previous disaster experience?  
Probe: Where, when, nature of experience, extent of involvement, etc.

18. How did you personally get involved in tornado-related activities?  
Probe: Who, if anyone, first contacted you? Did you contact anyone else? Who? Nature of contact?

19. What, if anything, led you to believe that there would be a need for mental health (or counseling) services after a tornado?  
(1) Did anyone influence you to do this?  
(2) Did you have any personal experiences which might have influenced you?  
(3) Were you influenced by anything you might have read or heard from mass media?

Now that we've talked about your experiences and activities related to the tornado, there are just a few final questions that we would like to ask you.

20. Have you had any specific training in the mental health area?  
Probe: A. Respondent's level and type of formal education  
B. Did the kind of training you received lead you to adopt any preferences for any particular kind of approach or orientation?  
C. Do you think that your formal training was of help in working with the Xenia disaster victims?

21. What about any training for the specific activities you carried out after the tornado (e.g., special training and debriefing sessions)?  
Probe: A. Description of training -- who, what, when, how?  
B. Degree of respondent's involvement (i.e., frequency of attendance, number of hours of training)  
C. Usefulness for disaster-related work  
D. Usefulness in other areas of respondent's life? Other benefits (e.g., changes in respondent's social relationships)

22. Are you currently employed? (What kind of work person normally does, where, and length held job)

23. Was there anything about your current employment which was useful in your disaster-related work? Any other experiences?

Were there any other experiences or skills which you acquired as a result of working in a disaster situation which have been useful in other situations or in your regular job?
24. As a final question,

1. Looking back over your experiences, do you feel there are things you or any of the agencies might have done differently? Did things happen pretty much as you had expected?

2. What advice would you offer other individuals or groups similar to yours?
APPENDIX B

Informant Interview Guide
Informant Interview Guide

Interviewer: Get full name and position of informant.

First of all, I'd like to ask you a few general questions about this organization before we get to your more specifically tornado-related activities:

1. What was the organization set up to do?
   Probe: Complete inventory of goals and objectives

2. At the time of the tornado, to whom was this organization responsible?
   Probe: A. Lines of authority, including possible multiple ones
   B. Nature of authority (financial, setting of policies, appointments, etc.)
   C. Degree of independence or autonomy
   D. Budgetary position and how normal budget requests are handled
   E. Probe for any changes in above
   F. Probe for possible problems of coordination with Dayton-based agencies

3. Before the tornado, did this organization have any control or supervision over any other group? Has this changed in any way? How?

4. Before the tornado, what types of services did this organization typically provide?

5. What kinds of people (e.g., age, sex, social class, ethnic) does your organization serve?

6. Prior to the tornado, did you have any kind of outreach or home visitation service?
   For how long?
   Probe: A. Number of staff involved
   B. Percentage of overall time spent
   C. Number of clients
   D. Nature of outreach service

7. How does this organization typically get its clients? (pre-tornado and post-tornado)
   Probe: A. Criteria for selection
   B. Primary sources of referrals

8. Prior to the tornado, about what percentage of your clients did you refer to other agencies?
   Post-tornado?
   Probe: A. Criteria for referral
   B. Primary agencies referred to
9. Before the tornado, which organizations, agencies, or groups had you worked with the most closely?
   Probe: A. Nature of relationship and frequency of contact
   B. Pre- and post-tornado differences, if agency is not a new one

10. What kind of relationship do you have with the other contracting agencies under the 648 Board?
    Probe: A. Frequency of contacts
         B. Nature of contacts
         C. Referral relationship
         D. Evaluation of working relationship among agencies

11. What effect, if any, do you think the tornado had on inter-agency relationships?
    Probe: A. Changes in frequency of contact and communication
         B. Changes in frequency of referrals
         C. Changes in areas of responsibility, function, exchange of data, referrals, etc.
         D. Changes in treatment-prevention strategies or mental health philosophy
         E. Extent of cooperation or conflict

12. How much contact does your organization have with the 648 Board?
    A. How frequently?
    B. With whom on the 648 Board do you have the most contact?
    C. What is the nature of these contacts (for what purposes)?
       1. planning
       2. policy decisions
       3. training and education
       4. advisory
       5. adding resources (personnel, funding, facilities)
       6. supervision and review
    D. Does someone from your staff attend 648 Board meetings?
       Does someone from the 648 staff attend your meetings?
    E. How would you evaluate the contact you've had with the 648 Board?
    F. Do you think that the 648 Board has had any difficulty establishing legitimacy with any of the various contract agencies?
    G. Have there been any significant disagreements between the 648 Board and your agency regarding:
       1. matters of policy?
       2. concept of mental health and treatment-prevention strategies?
       3. questions of authority?
       4. funding decisions?
       5. program adequacy?

H. As you see it, what is the responsibility of the 648 Board?
   Do you have any formal relationship with the Board?
I. What do you know about future plans for mental health services in the Xenia area since the passage of the mental health levy? 
Probe: Specifics of the plan

J. Was your agency consulted with regard to overall mental health planning?
What were its recommendations, if any?

K. As far as you know, does the new plan have consequences for your organization?
What is the reaction of your agency to this?

13. What effect, if any do you think the tornado had on the relationship between your agency and the 648 Board? (Distinguish, when relevant, between staff and board.)
A. Did the tornado seem to encourage closer contact between your agency and the Board?
What about between your agency and the staff?
B. Do you think the tornado helped to strengthen (or weaken) the position of the Board in relation to your (and other) agency? (legitimacy, authority, power)
C. Did the tornado seem to help or hinder the Board's exercise of leadership in relation to the various service agencies, yours especially?
D. Did the tornado seem to aggravate or improve any previously strained relationships between the Board and the agencies?

14. What effect, if any, do you think the passage of the last levy had on the relationships between service agencies and the Board?

15. Now to turn more specifically to the tornado, what types of activities has your organization or agency been engaged in since the tornado?
Probe: A. Exact descriptions of activities and/or services (time dimensions, names of co-workers and agencies)
B. Whether on-going or emergent

16. We understand that there were some people from the Ohio Department of Mental Health and Retardation in Xenia after the tornado. What contact did you or other staff members with your agency have with these people?
A. What role did the Department people play in organizing a response to the tornado?
Is this degree of involvement typical?
Why do you think they were so active?
B. Do you think that these people provided any effective leadership for the service agencies in Xenia?
What kind and under what circumstances?
C. Do you think that anyone with your agency perhaps viewed the presence of these people as an unwelcomed intrusion in local affairs? Did everyone agree that their role was a legitimate and needed one?
D. On the whole, how would you evaluate the role played by the Department of Mental Health following the tornado?

E. Did these people in any way influence any of the programs or plans initiated by your agency?

17. If psychological counseling services (or their equivalents) were NOT mentioned above, ask:
Did your agency provide any services that might be described as emotionally or psychologically supportive?

If such services were mentioned above, probe the following:
A. What led you to think that there would be some need for these activities?
   Probe for influences, where and when idea originated
B. Is this a new activity for your organization?
C. How was the decision made to engage in this activity?

   1. Who was responsible for the decision?
   2. Where did the idea originate?
      (Probe for outside influences, such as state department, NIMH, consultants.)
   3. Were any meetings or discussions held?
      Who was involved?
   4. Were any other alternatives considered?
      Were there any disagreements over alternatives (who and why)?
   5. About how long did it take you to arrive at this decision?

18. What kinds of problems, if any, did your organization experience in attempting to provide services after the tornado?
Probes: Problems relating to coordination with Dayton agencies, especially
A. Problems of internal coordination (formulation of goals and objectives, communications, lack of facilities, staffing, utilization of volunteers, status conflicts)
B. Problems with external groups, agencies, and individuals (e.g., convergence of volunteers and personnel from federal and state agencies, lack of funding, problems of coordination)

19. Did any other agencies or individuals (state, federal, or local) attempt to urge, direct or advise your agency to establish any particular kind of service?

20. Based on your experience, what kinds of psychological or emotional problems existed after the tornado?
Probes: A. How does this differ from expectations?
   B. Reason(s) for expectations?
   C. Did you have any contact with outside consultants on this matter? (Probe: nature and evaluation of contact)
21. How did you go about determining what persons needed emotional or psychological support?

22. Do the kinds of psychological and emotional problems occasioned by a disaster require different types of services? What types? Why?
   A. Would you say that at the time of the tornado there were agencies or organizations in the Xenia area providing this kind of service?
      Who?
   B. Is there a need for "outreach" programs?
   C. Was there any concern expressed about duplication of effort?
   D. Were there any new groups, organizations, or individuals that you are aware of which were set up to offer new mental health related services as a result of the tornado?
      Probe: Awareness and evaluation of Disaster Follow-up groups, whether or not respondent is aware of its relationship to 648 Board, etc.

23. As far as you know, what types of services are these organizations providing:
   Probe: Tornado-related mental health functions mainly
   1. Crisis Center
   2. Guidance Center
   3. Family Service Association
   4. Interfaith
   5. Disaster Follow-up
   6. Golden Age Senior Citizens
   7. Antioch Encounter Programs, Inc.

24. Are there any other agencies, individuals, or groups in the Xenia area providing mental health related services, as far as you know?

25. What about non-Xenia groups, perhaps in Dayton, Fairborn, Yellow Springs, etc?
   (Note: The following two questions are for strictly mental health agencies or those who use the term "mental health.")

26. The terms mental health and mental illness are often applied to the area we have discussed. Do you feel these terms are useful? What do you mean by them?

27. From your agency's perspective of community mental health --
   (1) Who would be defined as mentally ill and in need of outside help?
   (2) What are some of the most effective strategies in dealing with psychological and emotional problems such as those you mentioned above?
   (3) What kinds of qualifications and resources do you think are necessary to perform these kinds of services? (i.e., personal
expertise, organizational resources to administer expertise, etc.)

28. Looking back over your experiences, do you feel there are things your organization might have done differently? Did things happen pretty much as you had expected?

29. What advice would you offer organizations similar to yours?
APPENDIX C

Mail Questionnaire for Volunteers
Mail Questionnaire for Volunteers

Section A. Did you participate in the delivery of mental health or emotional support services at any of the disaster centers (Red Cross or One-Stop) or Greene Memorial Hospital in the first few weeks after the tornado?

Yes _____ No _____ (IF NO, SKIP TO SECTION B - BELOW)

1. Where did you first get the idea to volunteer at the disaster centers or the hospital? Mental Health Association ___ Friends or family ___ Employer ___ Own idea ___ Church ___ The mass media ___ Ohio Dept. of Mental Health ___ Other people at work ___ Other (Specify) __________

2. Please give a description of exactly what you did at the disaster centers or hospital.

3. Overall, what percentage of your activities at the disaster centers or the hospital consisted of giving clearcut emotional and mental health care? __%

4. On the average, how many other persons worked directly with you in the delivery of mental health services at the disaster center (or the hospital)? #

5. What individual or group was responsible for directly supervising your work? Give name or position. _______________

6. How much supervision for mental health workers was there at the center where you worked? Too much ___ About the right amount ___ Not enough ___

7. How often did you communicate or have contact with others working in mental health services at the various disaster centers (and the hospital)? Very often ___ Often ___ Sometimes ___ There was almost no communication or contact with the others ___

8. How clearly specified were the tasks you were to perform at the centers or the hospital? Very clearly ___ Clearly ___ Not clearly ___ Not at all clearly ___

9. Were the actual tasks you performed at the centers (or the hospital) different from what you expected they would be when you first volunteered?

Yes ____ No ____ (IF NO, PLEASE EXPLAIN) __________

10. If you are employed, did other members of your organization volunteer for this program at the disaster centers and Greene Memorial Hospital?

Yes ____ (IF SO, HOW MANY) ____ No ____
11. Did your employer cooperate with your volunteer activities in any of the following ways? Gave me time off without pay ___ Gave me time off with pay ___ Helped arrange transportation ___ Helped to train and organize volunteers ___ Other (Specify) ________________

12. About how many days in all did you participate in these efforts?__

13. Why did you stop participating in these activities? ________________

14. Overall, how effective do you think these efforts were in alleviating mental health problems? Very effective ___ Effective ___ Mixed feelings ___ Ineffective ___ Very ineffective ___

15. Looking back, what were the major problems associated with this program?

Section B. Did you participate as a volunteer with the Disaster Follow-up Group or Interfaith Advocates? Yes ___ PLEASE CIRCLE WHICH GROUP No ___ (IF NO, SKIP TO SECTION C)

1. Where did you first get the idea to volunteer for this program? Mental Health Association ___ The mass media ___ Friends or family ___ Employer ___ Other people at work ___ Church ___ Own idea ___ Ohio Dept. of Mental Health ___

2. Were you paid for your efforts? Yes ___ No ___

3. About what percentage of the total volunteer work you did was devoted to the following types of activities? Counseling ___% Agency referrals ___% Providing material and physical assistance ___% Listening and talking to people about problems ___% Other (Specify) ________________

4. How much supervision for the volunteers was there in this program? Too much ___ About the right amount ___ Not enough ___

5. How clearly specified were the tasks and activities you were to perform in the program? Very clearly ___ Clearly ___ Not clearly ___ Not at all clearly ___

6. Of the following types of activities and tasks, which were the most difficult to perform? Counseling ___ Agency referrals ___ Providing material and physical assistance ___ Listening and talking to people about problems ___ Other ___

7. How adequate do you feel the training program for volunteers was in preparing you for the work? Very adequate ___ Adequate ___ Mixed feelings ___ Inadequate ___ Very inadequate ___

8. About how often did you communicate or have contact with others working in the volunteer program? Very often ___ Fairly often ___
Sometimes __ These was almost no communication or contact with the others __

9. About how many of the people in the program did you know before becoming a volunteer? Almost no one __ A few __ About half __ A majority __ Almost everyone __

10. During which of the following months did you participate in the volunteer activities? April __ May __ June __ July __ August __ September __ October __ November __

11. Are you still participating in these activities? Yes __ No __ (IF NO, WHY DID YOU STOP?)

12. Overall, how effective do you think the volunteer program you participated in was in alleviating emotional and mental health problems? Very effective __ Effective __ Mixed feelings __ Ineffective __ Very ineffective __

13. Looking back, what were some of the major problems associated with the program?

Section C. Other than those activities mentioned above, did you participate in any other activities aimed at alleviating emotional and/or mental health problems associated with the Xenia tornado? Yes __ No __ (IF NO, SKIP TO SECTION D - BELOW) IF YES, briefly describe what the activities were, who you worked with, any problems encountered, how long you worked, and how effective you think they were.

Section D. We would like to get a better picture of the specific types of emotional and mental health activities you engaged in, as well as your impressions of how disasters affect mental and emotional health.

1. In general, to what extent were these activities you described above similar to what you are accustomed to doing on an everyday basis? Very similar __ Similar __ Dissimilar __ Very dissimilar __ (IF THEY WERE DISSIMILAR, HOW SO?)

2. When you were engaged in activities aimed at alleviating mental health or emotional problems after the disaster, which ONE of the following criteria did you most often use to determine whether someone had an emotional or mental health problem? ___ Psychiatric diagnosis or other diagnostic examinations by trained mental health workers ___ A person's social maladjustment, or inability to adapt positively to his social situation as perceived by others, such as friends, relatives, parents, etc.
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3. If a person displayed some sort of emotional or mental health problem, which one of the following things did you usually do? (Check the one which you most commonly did.)

- Make a referral to a mental health agency
- Provide immediate counseling to the person
- Listened to the person's problems to help him find immediate solutions
- Attempted to establish a personal follow-up contact with the person
- Other (Specify) __________________

4. As a result of your experience in Xenia, how would you say disasters affect the number of persons in a community who have emotional and mental health problems? Increase greatly ___ Increase slightly ___ Remains the same ___ Decrease slightly ___ Decrease greatly ___

5. About what percentage of the people in Xenia do you estimate have some kind of emotional or mental health problem as a result of the tornado? ___%

6. Based on your experience, do the types of emotional and mental health problems resulting from a disaster require different types of treatment strategies than most other types of mental health problems? Yes ___ No ___ If Yes, what types of services? ________ ________________ Why? ______________

7. When do you think that emotional and mental health services are most needed after a disaster? Immediately after ___ During the first few weeks ___ A few months afterwards ___ About a year later ___ Other (Specify) __________

Turning away from the disaster for a moment...

8. The terms mental health and mental illness are often used to refer to a variety of emotional and psychological problems. Please indicate the items below which best represent what poor mental health (or mental illness) means to you. Rank the items below from 1 to 5, using 1 to represent the most important criterion.

- A person's own feeling of unhappiness, inadequacy, or lack of well-being
- A person's social maladjustment, or failure to live up to social and community standards
- A person's failure to live up to his own potentialities
The presence of irrational and antisocial behaviors which are symptomatic of psychological disorders
General problems in living

9. Although more than one of the following criteria may be important in assessing a person's mental health, please check the ONE that you feel is the most important in determining whether someone has a psychological or emotional problem.

- Psychiatric diagnosis or other diagnostic examinations by trained mental health workers
- A person's social maladjustment, or inability to adapt positively to his social situation as perceived by others, such as friends, relatives, parents, etc.
- A person's failure to adapt to social and community standards of behavior as defined by institutions, such as the schools, courts, employers, etc.
- Other (Specify) _____________________

10. A variety of factors are thought to cause different kinds of emotional and psychological problems. Which of the following best represents your opinion of the source of most mental health problems. Rank each of the factors you select from 1 to 5 depending upon their importance in contributing to such problems, with 1 being the most important.

- Heredity
- Poor physical health
- Childhood or pre-adult experiences
- Stresses or tensions in the current social environment
- Personal crises in one's adult life

11. Of the following theoretical and/or therapeutic approaches to mental health care, select those orientations with which you associate yourself. Psychoanalytic ___ Behaviorism ___ Gestalt ___ Transactional analysis ___ Reality therapy ___ Structured group interaction (sensitivity, encounter, etc.) ___ Psychodrama ___ Group and family therapy ___ Other (Specify) ______________________________

-----------------------------------------------
Section E. We conclude with some general questions about you and your background.

1. What is your age? _____ 2. What is your sex? Female ___ Male ___

3. Immediately prior to the tornado, what was your occupation? Please be specific (e.g., social worker in a welfare department, college student majoring in clinical psychology, housewife, etc.)

4. How useful was your current occupation in helping you to perform the mental health activities you engaged in after the tornado? Very useful ___ Useful ___ Mixed feelings ___ Useless ___ Very useless ___
5. What is the last year of schooling you completed? _____ Please specify the highest degree you have obtained in school (e.g., M.A. in clinical psychology, M.S.W., B.D., B.A. in psychology, etc.) ____________________________

6. Briefly, describe any other types of training you have had, if any, in the mental health field.

7. If you had no specific and formal mental health training prior to your disaster work, have you ever done any of the following? Ministerial counseling ___ Participated in group therapy or encounter or sensitivity groups ___ Provided any kind of counseling ___ Received counseling or mental health care yourself ___

8. In the last five years, have you ever volunteered your services to any of the following types of associations? Social ___ Fraternal ___ Religious ___ Civic ___ Professional ___ Cultural ___

9. Was your dwelling damaged in any way by the tornado? No damage ___ Minor damage ___ Major damage ___ Total damage ___

10. Have you ever experienced any of the following:
    a) Direct wartime experience. WHEN _________ WHERE _________
    b) Natural disaster. WHEN _________ WHERE _________
    c) Personal catastrophe or crisis. WHEN _________

11. In looking back over your experiences, do you now see anything that you might have done differently?

12. Do you have any recommendations or advice for other communities with regard to disaster planning insofar as mental health services are concerned?
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