

UNIVERSITY OF DELAWARE
DISASTER RESEARCH CENTER

PRELIMINARY PAPER #10

THE FAMILY AND COMMUNITY CONTEXT OF
INDIVIDUAL REACTIONS TO DISASTER

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and
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Prepared for the NIMH Continuing Education Seminar on Emergency Mental Health Services, Washington, D.C. June 22-24, 1973.

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Disaster events by their very nature are not everyday occurrences. For most people, therefore, the experiential dimension concerning disaster behavior tends to be mediated through others, generally through the mass media. Mass media accounts generally emphasize stories of individual reactions which are dramatic and traumatic. The extensiveness of the individual trauma is often used as the primary measure of newsworthiness: the greater the trauma, the greater the newsworthiness. Consequently, the "experiences" that most persons have with disaster effects are those which focused on individual trauma. Such reportage, in addition, often implies a causal sequence somewhat as follows:

1. disaster agents create effects which produce extensive individual disorganization.
2. aggregate individual disorganization, in turn, creates family disorganization.
3. aggregate family disorganization creates community disorganization.

In such a causal sequence, psychological stress is seen as additive and when some "optimum" number of individuals are affected by stress, the entire community can be characterized as disorganized. Since such linkages are consistent with certain individualistic assumptions common in American society and since few people have extensive experience in a variety of disaster situations, such causal linkages seem very logical.

This set of interrelated assumptions about disorganized behavior is often central to initiating remedial actions in disaster situations. The assumptions about widespread disorganization, for example, are often used to justify urgency in providing "outside" assistance for disaster areas. A variety of "assistance" programs are then established based on the assumed needs for such programs within such impacted areas. The effectiveness of such programs, however, are seldom evaluated. If they are, they tend to be evaluated by involved staff members who usually attribute their lack of success to the absence of prior planning, the lack of rapid mobilization or some other convenient bureaucratic targets. Such efforts at assistance tend to be reinvented and repeated over and over again in every major disaster, primarily because few persons have any cumulative experience in disaster.

There is, however, a major source of cumulative experience about disaster which is available and which is found in the research tradition dealing with the human aspects of disaster (8). This tradition is the result of the work of many individual scholars and research organizations in many different nations (1, 7, 9, 15, 16). Without reviewing this tradition here, we will use it to critique the common assumptions just set forth. This research tradition suggests a quite different causal chain. It suggests that, as a result of disaster, individual disorganization is somewhat minimal. The reason that it is minimal is that the potential effects are mediated through the various social structures within which individuals play roles. Here we will be particularly concerned with the family and the larger community context as mediating structures. A consequence of such structural mediation is that, in most disaster situations, individuals are able to exhibit situationally adaptive behavior. Rather than being characterized by widespread maladaptive behavior, disaster situations are, in many ways, characterized by a greater proportion of adaptive goal oriented behavior than is often true in so-called normal situations. In addition, the trauma which is inherent in such situations is probably handled more effectively and has fewer longer term consequences than does "normal" trauma.

Unfortunately, "disaster" is one of those sponge terms in the English language which encompasses almost any phenomena one dislikes. Here we are restricting the meaning to the "social disruption" which is the consequence of the physical damage created by such "natural" agents as tornadoes, earthquakes, etc. More narrowly, we will be concerned with those agents which are characterized by a sudden impact and which create a rather diffuse damage pattern within an urban community. We will also concern ourselves with the immediate pre-impact and post-impact setting and consequently slight some possible longer term consequences.

Here we will be concerned with four areas. First, we will be concerned with the warning process in which there is the interpretation of danger which has to be made by aggregates of people. Second, we shall consider the reactions, preventative and otherwise, which persons take when danger is imminent. Third, we will be concerned with the reactions of persons in the immediate post-impact situations. Fourth, we will be concerned with the handling of loss, either in terms of persons or property.

Warning of Threat

Three assumptions are frequently made about warnings of impending disasters. It is assumed (a) official warning messages will go directly to individuals; (b) that these individuals will primarily respond directly to the content of that message; and (c) that the message acting as a stimulus will evoke a response which may be maladaptive unless great care is taken in the wording of the message. These assumptions, in the main, are incorrect. As Charles Fritz (10) has noted, "Many of the difficulties in obtaining the desired responses to warning stems from an oversimplified conception held by persons issuing warning information. They often conceive of warning as a direct stimulus-response type of communication, in which the person issuing the warning gives the signal 'danger,' and people automatically respond as though danger were imminent." In actual fact, most people typically get warnings indirectly through other people and assess the possible validity of the message through perceiving the actions of others as well as interacting with them. They act on the basis of their interpretation of the "warning messages" as this is mediated by the groups of which they are a part.

It is true that most people in most American disasters typically get their first or initial warnings from one of the mass media sources. Thus, 91 percent first heard of Hurricane Carla (16) from either radio, television or newspapers, although a more typical example is the situation in Denver, Colorado (5) where about half of the households got an initial warning of a flood from mass media sources. But generally even this first warning is received in the presence of known others. Thus, one systematic field study (5) found that while 52 percent of the 278 families studied received their initial flood warning from either radio or television, two-thirds of those families received the warning in the presence of other family members. Equally as important, persons typically get additional warnings from personal contacts outside of their own households, sometimes in place of other warnings, far more often in addition to the initial warning. For example, almost all studies such as one of Hurricane Camille and tornado situations where warning was possible, indicate that after the initial warning, people receive information on the threat from multiple other sources, especially kin members (Drabek (6) reports that 26 percent got their first indication of possible danger in a flood from friends, neighbors, or relatives). Put very simply, where it is possible, people generally learn of

danger through and/or with known others, especially family members.

Given the social and group context in which warnings are received, it is not surprising that the context rather than the content of the message is more important in influencing the response. That is, instead of directly responding to the warning message, there is an attempt to assess its validity on the basis again of how known others react to it. Thus, one study (6) reported that "friends, relatives and neighbors served as an important confirmation mechanism. As might be expected, interaction with neighbors was largely face-to-face, whereas friends and relatives were usually contacted via telephone." Interestingly, authorities are seldom contacted. In the study just alluded to, only 9 percent of the households attempted to check with officials in the community. Put another way, most families warned of danger look to see how others are interpreting the "warning" message. The validity of its content is filtered through a context of activities of personally known others.

Even when confirmation of danger is obtained, there is no automatic bolting to get away from the supposed threat. Time is usually taken to assess what known others are also doing and what the consequences for the family will be if the threat were to materialize. If others are leaving there is a tendency to leave; if others are staying there is a tendency to stay. It is particularly noticeable that in situations where there is a disaster subculture, (i.e., a tradition of response to emergencies partly derived from earlier community disaster experiences) there is a strong tendency to minimize the possible impact of the danger. Not only prior experiences, but collective assessments of possible consequences for selves and property through discussion among family members influence if and how a response is made to warnings. In short, even when warnings of danger are accepted, a variety of alternate responses are probable, because the actual response is derived from the social context.

Immediate Reactions to Threat

Certain assumptions are often made about the typical range of immediate reactions of individuals to disaster situations. It is assumed that disaster victims behave in very disorganized or dysfunctional ways. This supposition rests on the notion that the typical patterns of response either take the form of (a) "panic" (b) "shock" or (c) passivity. Although this view is widespread, even in the thinking of personnel of disaster organizations, it is generally an incorrect one according to almost all systematic disaster studies conducted. Disaster victims do not break into panic flight or otherwise markedly engage in behaviors characterized by irrational decisions, illogical actions and an anti-social disregard for others. Likewise, persons involved in disasters are seldom so stunned or shocked that they can not adaptively respond. Nor do victims lack initiative, become docile or wait childlike for relief workers or the authorities to command them and to tell them what to do in the emergency. Instead, disaster victims generally assess with others the demands of the immediate situation facing them, move collectively to deal as best as they can with the perceived problems, and otherwise actively attack with their fellow victims the emergency.

Disaster studies show that people do not flee wildly from a disaster area. Solo or collective panic flight in fact is so rare as to be an insignificant practical problem. Stories to the contrary about "thousands" abandoning their communities under some threat, most people remain letting tourists and transients flee. Even in the highly atypical, largest evacuation in American history when more than a half million persons left coastal areas of Texas and Louisiana in the face of Hurricane Carla, despite four days of warning, 55 percent of the population remained in their own areas (16). Together with their fellow citizens most residents stay and make decisions such as where to build levees or when to go to tornado shelters, or they join together with friends, relatives and neighbors in boarding up houses or removing store stocks to upper floors of buildings. And when there is evacuation from some location, such movement tends to be orderly, logical and adaptive, with pre-disaster social ties being maintained. Thus, one disaster researcher after another has reported that evacuation is almost always by family units, not solitary individuals (e.g., in one flood situation studied (6), among families which were together prior to evacuation, 92 percent left together). Even when evacuation is very sudden, as one study of a dam break threat showed, 23 percent of those fleeing assisted community members other than those who were in their own original fleeing groups(3). So, far from individualistic panic flight, although flight might be necessary, there usually is a collective and reasonable response to an immediate threat.

There is some limited evidence of what has been called a "disaster syndrome" (i.e., a state of shock leading to regression in normal cognitive processes). However, it appears only in the more traumatic and sudden kinds of catastrophes, is confined to the post-impact period, lasts only a short time (minutes or hours), and does not occur on a large scale (19). One disaster study (11), for example, using an area probability sample, found that at most only 14 percent of all respondents may have manifested some of the initial stages of the syndrome. Nor do disasters generally have disabling emotional consequences or leave numbing severe mental health problems among any large numbers of their victims. It is true that a majority of the population in the disaster struck areas will often show varying degrees of stress reactions in the aftermath of a major emergency (e.g., anxiety, nausea, etc.). But what is important is that such reactions do not basically affect the willingness and ability of people to take the initiative and to respond well especially in the emergency period. In one tornado study the victim and fringe population, with almost no aid from formal agencies, were able within three to four hours to rescue to nearby hospitals from two-thirds to three-fourths of the 927 casualties (9). Isolated cases of shock and inability to act with others can be found in some disasters, but such a response is nowhere near being a typical disaster response pattern.

Disaster victims react in an active manner not passively. They do not just wait around for offers of aid by organizations or outsiders. They act on their own. On a large scale, once they have started to react to the crisis, victims show personal initiative and a pattern of self and informal mutual aid. The National Opinion Research Center (15) in one of its disaster studies found that 43 percent of all males in the impact area searched for the missing and 21 percent engaged in rescue efforts in the 6 hours after tornado impact, and where there was evidence that at least 55 percent of this activity was not oriented solely to kin or intimates. Similarly, when victims evacuate they do not usually go to public or institutional shelters, but instead seek refuge with friends and relatives. Thus, Drabek and

Boggs (4) found in a flood situation that only 3.5 percent of the families studied went to any type of organizational shelter, and Moore (16) noted that 58 percent of the families fleeing Hurricane Carla moved into other private quarters. In the recent San Fernando earthquake fewer than 7 percent of 70,000 persons evacuated below a weakened dam sought housing aid from public agencies. It has become a rather consistent finding among disaster researchers that disaster victims turn first to kin, co-workers and known others for aid, and only after exhausting other sources, attempt to get assistance from formal organizations. In the immediate emergency, victims do not stand and wait for "Big Brother" to tell them what to do; instead usually working with others they tackle the problems they see, be they digging out trapped victims from under debris or obtaining temporary shelter for the night. In short, even under very severe stress people do not become completely irresponsible or totally impotent; rather they seek in conjunction with others to solve their emergency problems in those ways that seem reasonable to them as they view the situation. Generally the same can be said of them that has been said of combat soldiers; "Under the most harrowing circumstances, they are able to control fear and anxiety, to think clearly and to make appropriate decisions with rapidity" (12).

Immediate Reactions to Impact

One concern that is often expressed is the possibility that those survivors in the immediate impact period would be faced with agonizing choices as to the direction of their attention and efforts. In particular, there is concern about the consequences and effects of role conflict in disaster situations. This concern was often derived from an influential article published by Lewis Killian entitled "The Significance of Multiple Group Membership in Disaster" (14). Killian's stated intent was to develop a typology of role conflict that might generalize to situations other than disaster, since multiple group membership was an integral characteristic of all modern societies. While he identified four different types of possible conflict, he devoted most attention to the possible conflict between the family and other groups, principally the employment group or the larger community. In subsequent years, a particular section of Killian's paper was frequently quoted in the popular social science literature.

The great majority of persons interviewed who were involved in such dilemma resolved them in favor of the family, or in some cases, to friendship groups. Much of the initial confusion, disorder, and seemingly complete disorganization reported in disaster communities was the result of the rush of families to find and rejoin their families.*

Such social science "findings," of course, would have important practical implications. If persons in crises situations resolved their role conflicts in terms of family loyalties, any coherent organized emergency activity would be difficult if not impossible to achieve and would make outside assistance essential. The expectation that such a "familial retreat" as a usual consequence was of considerable concern to those charged with emergency planning.

*

Note: Most of those who use the quote, however, drop off Killian's next line: "Yet in none of the four communities studied did the disastrous consequences contemplated above seem to have materialized."

The Community Role System

Role obligations are ultimately based on values and any community system can be viewed as the collective attempt to achieve many different values. Thus, in a normal state, time, energy and other resources are normally available to achieve multiple values, even when some of these values are potentially contradictory. Thus a somewhat free market state exists which allows the achievement of multiple but often conflicting values. But, a disaster event changes this. No longer can the "community" assume that the resources will be in plentiful supply so that all values can be achieved. Choices have to be made. Certain values become more critical than others in the survival of the community and therefore are more important in the allocation of resources. This means that certain norms and roles become important while others become less important. This set of value priorities has been called elsewhere an "emergency consensus" (7). It has as its highest priority, the care for disaster victims, both of a medical nature and for the provision of basic necessities. Somewhat lower in the priority system are those tasks which are directly relevant to achievement of core values -- e.g., restoration of and maintenance of essential community services, maintenance of public order, etc. Other traditional roles within the community, however, are drastically altered. For example, those roles related to production, distribution and consumption of goods, those related to socialization and to social participation, are in large part irrelevant to the key values within the emergency context. Thus, while the emergency consensus makes certain roles more critical, it makes other role obligations completely irrelevant. The net result from the viewpoint of the individual is to reduce the scope of the total role obligations and as a consequence to minimize the probabilities of role strain for individuals. At the same time, this insures the more adequate performance on the part of individuals in those critical roles which remain. The total role structure, thus, becomes more coherently organized around a set of value priorities and, at the same time, irrelevant roles which could produce strain are eliminated until the emergency is over.

The Role Structure of Emergency Relevant Organizations

From the viewpoint of the total community system, a relatively small number of roles are essential for the immediate tasks created by disaster impact. The more obvious problems, and therefore the most known problems, are those which involve search and rescue of victims, the provision of medical attention and the protection against continuing threat. These tasks are usually assumed by various community organizations in which there is a high probability that persons will occupy the positions and perform the roles with competence. Such organizations -- police and fire departments, hospitals, ambulance services, segments of public works departments, etc. -- are structured with such emergency tasks as a part of their organizational domain. Thus, they build into their organizational roles certain explicit expectations about emergency behavior as well as other implicit understandings about emergency obligations. These involve the expectations to stay on the job, if on duty, when the emergency occurs or to report to duty when knowledge is gained that an emergency has taken place. These expectations may be generally understood and/or they may be institutionalized into organizational notification schemes -- fan-out systems, etc.

Such emergency organizations generally operate around the clock. With multiple shifts, they have between two and three times the personnel necessary to maintain the normal operations at any one time. The possibilities of expansion of organizational activities to compensate for overloads also allows for a surplus to compensate for any potential loss of personnel from injury or from absence from role conflict. Because of the assurance that these organizational members on duty will remain, other organizational members not on duty have the reassurance that they have time to check personal and familial damage and also to engage in limited amounts of non-occupational role behavior before reporting. In addition, the built-in guarantees of multiple persons to fill specific roles minimizes the effects of the loss of any one occupant of a specific role.

With the expectation of a relatively small number of individuals who have immediate responsibilities in relevant emergency organizations, most other occupational roles within the community system become irrelevant. This, then, frees individuals to perform familial roles or to perform more informal altruistic, neighboring, helping roles. For example, most of what is called search and rescue operations are conducted by "unattached" persons in the impact area. The initial actions of these individuals is often supplemented later by more organized activity. While this activity is sometimes viewed by outsiders as being disorganized, it is a situation where individual and small informal groupings become involved in similar activities. The individuals who participate usually have no other specific role responsibilities in the emergency or, if they do, their initial actions are considered by themselves and by others to be within the scope of their occupational involvement -- e.g., a policeman or a fireman becoming involved in search and rescue activity. Search behavior for family members, neighbors and any others is seen as a legitimate role expectation for those without explicit emergency role obligations since it is consistent with the core values which have become critical in the emergency.

The Family as a Role Budget Center

With the "simplification" of the role structures within a disaster impacted community, existing family units can make internal allocative decisions which facilitate the assumption of various emergency roles on the part of various family members. Two illustrations will provide some of the range of possibilities. In one major earthquake, a man who had had previous volunteer experience with civil defense assumed the responsibility of keeping the local CD office open so that the CD director could deal with field operations. His wife came with him and assumed much of the clerical and secretarial responsibilities and their teenage daughter who was no longer in school played an important role as "messenger" from local CD to other offices. In this case, an entire family unit assumed a major portion of the expanded role responsibilities of the local CD director. In another situation, an employee of a public works department experienced heavy damage to his own house. He moved his family over to a relative's house and the two families combined to make the best of the emergency situation. There was "sufficient personnel" within the two families to allow his "release" from family activities and to concentrate on his increased occupational responsibilities during the emergency. In these situations, there were persons "released" from other obligations who picked up disaster responsibilities or there were persons who picked up familial responsibilities so that others could be released for participation within the emergency system. This suggests that

family units are able to consider the aggregate responsibilities of their members and make internal allocative decisions as to family resources. This allows the allocation of resources from these family units which, in turn, becomes a major part of the larger community mobilization. All of this suggests that both communities and family units within communities facilitate emergency actions rather than provide a set of barriers which present individuals with agonizing choices and psychologically debilitating consequences.

Coping With Loss

Of course, one of the major reasons there is concern about the resultant psychological effects of disaster is that they have the potential for creating widespread loss of life and property. The potentialities, however, are seldom realized. In most American disasters, there is an initial tendency to provide very high estimates of casualties. Immediately after impact there are inadequate conditions for collecting accurate information about its consequences. On the other hand, there is a very high demand for news. News, then, is derived from estimates created in the absence of information. Public officials generally guess high. These initial estimates are usually the figures that are subsequently remembered. By contrast, the ratio of casualties to the total number of persons involved has been quite low in every major disaster in recent American history. The largest death toll in any American disaster was in Galveston, Texas in 1900 where more than 5,000 persons perished in a hurricane. Aside from maritime disasters, only three other American disasters have resulted in over 1,000 fatalities. In fact, Red Cross figures show that, in a four year period from mid-1966 to mid-1970, major disasters only claimed 779 lives (20). We cite these figures not to minimize the potential suffering but to emphasize that disasters in American society tend to involve primarily property damage.

Even given a situation where there is widespread loss of life and property, there are several reasons which suggest that such losses have minimal traumatic psychological effects. "Ordinary" losses, such as the death of a family member or the destruction of valued property, are often difficult to bear since they raise questions for those suffering the loss as to why the tragedy happened to them, rather than to someone else. In addition, "random" or idiosyncratic events have an isolating and non-sharable quality to them. It is difficult for others to become aware of "random" tragic events and it is difficult for others to empathize and to provide sympathy for circumstances with which they are only tangentially familiar. In those disasters which do produce massive losses, two factors seem to be particularly important in making such losses "easier" to accept. These are the fact that (a) loss has to be evaluated in the context of relative deprivations and (b) that the "bereavement" process occurs within the context of increased social cohesion.

Suffering in the Context of Relative Deprivation

In most disaster-impacted communities, there is considerable communication about the extent and nature of suffering. The daily life of most persons in most American communities is characterized by rather routinized existence. Disaster events, however, are rather dramatic events which evoke extensive communication about their

consequences. One residue of such intensive communication is that American communities often date their collective histories by disaster events -- e.g., "that was before the flood," etc. Sudden suffering, as opposed to chronic or gradual suffering, tends to evoke more concern and communication. Too, in situations where the "victims" tend to be blameless, compared to situations where it is their own "fault," there is increased communication and concern. Also, since disaster tends to have somewhat random effects within the community, all social groups may be affected and become concerned with the consequences of disaster. Thus, those who have suffered from the disaster become salient as a reference or an identification group for others within the community. (By contrast, for example, blacks whose poverty is chronic, their own "fault," isolated from the rest of the community and the responsibility of the welfare department, are unlikely to evoke the same attention and concern.)

While those who suffer as a result of disaster impact become an important reference group within the community, those who have suffered, however, will find it difficult to see their own losses as being particularly traumatic since there are many others within the community, well known now as a consequence of the increased communication, who have suffered greater losses. The person who lost two family members is "luckier" than the person who lost four family members. The person whose house was damaged is "better off" than the person whose house was totally destroyed. The collective communications process tends to focus on "luck" and providence rather than selectivity and suffering.

In essence, then, disaster tends to provide rather optimum conditions for the acceptance of suffering. Natural disasters are rather free from those ideological disputes about cause and blame. Such conditions tend to reduce the barrier to communication and knowledge about suffering within the community. This makes for the greater saliency of sufferers as a common reference group and creates the conditions whereby those who suffer have to evaluate their own experience, not in terms of absolute deprivation, but always in terms of relative deprivation.

Increased Cohesiveness Within the Disaster-Impacted Community

One of the major reasons that suffering is easier to bear is that within the social networks within the disaster-impacted community there is a heightening of cohesiveness. This is due to a number of factors. There are increased opportunities for community members to participate in activities which are for the "good of the community." The emergency consensus places a high valuation on those activities that benefit the whole community and a low valuation on specialized selfish interests. Too, the disaster event creates needs that are obvious and solutions that are amenable to action which gives immediate pay-off. Previous social distinctions tend to be minimized since all groups and statuses within the community are affected. The democratization of social life is created by the fact that danger, loss and suffering become public phenomena. Community identification is enhanced by the dramatic event itself and one's participation in it.

These changes provide major gratifications for the survivors. People are able to confirm that others are basically like themselves. That people respond to disasters in somewhat similar ways provides reassurance for those who had previously felt isolated, detached or like "outsiders." They are able to see with a clarity never before possible that there are certain underlying "universal" values and that these common values provide a feeling of belonging and a sense of unity which is almost impossible to achieve in "normal" circumstances. Social relationships take on a primary group quality. As Fritz has suggested (10), "The quality of interaction within these groups and in the entire community of survivors approximates more closely the characteristics of intimate, personal, informal, sympathetic, direct, spontaneous, and sentimental interaction set forth in the concept of the primary group."

Obviously, there are many unique variables which can not be considered here which would ultimately affect the acceptance of loss but, in general, in those disasters which do create massive suffering, they also create the conditions in which relative deprivation also operates. Too, the increased cohesiveness which occurs moves the community toward a qualitative difference in social relationships which are precisely the types of support which have always been critical for adjusting to bereavement and in coping with grief in a socially productive manner.

Summary and Conclusions

Most widespread images of disaster behavior are based on the "weakness" of the average individual and the fragility of typical social organization in being able to cope with crises. The research tradition, however, tends to reveal the resilience of individuals and social structures under conditions of great adversity. Four different behavioral contexts were examined -- reactions to warning, reactions to threat, reactions to impact and coping with loss. In all of these situations, the family and the community context provided mechanisms which tended to reduce, deflect and soften the potential consequences of a disaster event.

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