

Judith Ann Miller, *Families in the Aftermath of Disaster: The Big Thompson Flood of 1976*. Unpublished Master's thesis. Colorado State University, 1977, 89 pp.

Edith Hill Kimball, *Recovery of the Older Survivors of the 1976 Big Thompson Flood*. Unpublished Master's thesis. Colorado State University, 1978, 110 pp.

Eve C. Gruntfest, *What People Did During the Big Thompson Flood*. Working paper, Institute of Behavioral Science, University of Colorado, 1977, 64 pp.

Each of these three works represents a case study of the big Thompson flood of July 31, 1976. Two of the studies (Miller's and Kimball's) use data from the same research project and both served as Master's theses for the Department of Child Development and Family Relationships at Colorado State University.

Gruntfest's study serves as a working paper for the University of Colorado's Institute of Behavioral Science. All three of the works center on behavioral patterns adopted by individuals or families in response to disaster. Miller and Kimball are concerned with coping mechanisms of disaster victims in the aftermath of the flood, while Gruntfest concerns herself with behavior patterns during the time of the flood. These works are a much-needed effort to discern crucial and yet relatively unstudied aspects of disaster behavior. Although the tasks adopted are commendable and worthwhile, unfortunately, the efforts lack thoroughness and sophistication, and consequently, the results are somewhat disappointing.

Before proceeding, it should be pointed out that Miller's and Kimball's works suffer from being master's theses. The structure imposed on an author in such a circumstance often inhibits and constrains any broad analytical effort.

The purpose of Miller's work is to determine whether there are specific patterns of recovery for families involved in the Big Thompson disaster. In order to reach the point of analysis, the reader must wander through a convoluted statistical morass only to discover that the search has been in vain, for analysis is non-existent. This maze is further complicated by 100 sub-headings crammed inside 60 pages. Miller's work most resembles an outline which forces one to stumble continually as the reader runs into breaking point after breaking point.

Kimball's report is also a compendium of statistical tables untouched by the analytical hand. This work can be summed up in two words: "statistics" and "scales". One particularly disturbing aspect is the author's habit of presenting a table immediately followed by a narration of all that is in the table. One or the other is sufficient; both are redundant.

Gruntfest analyzed behavior patterns adopted during the flood in the hope of applying the knowledge gained to the improve-

ment of warning systems design for front range communities vulnerable to flash flooding. In contrast to Miller and Kimball, Gruntfest's work is overburdened with description. However, the author does analyze her findings. Following analysis, the author compares her findings with findings from previous research and delivers several "interesting" recommendations, i.e., for flash flood victims: (1) climb to higher ground; and (2) do not drive. The work does contain a few significant and interesting elements, however. Hypotheses from previous literature are examined (p. 11) and an annotated bibliography on the Big Thompson flood is presented in the appendix.

Much of the disaster mental health literature contains vague and loosely defined concepts. Miller and Kimball are not exceptional in this respect. Both authors employ the terms "crisis" and "trauma" in a rather cavalier fashion. Miller (p. 39) and Kimball (p. 32) discuss the role of previous crisis experience as a coping tool for disaster victims, yet neither recognizes that a family crisis is *not* the same as a disaster. Family crises and disasters differ quantitatively and qualitatively, and yet these authors do not bother to point out such distinctions. Furthermore, the trichotomy of very traumatic, traumatic and no trauma at all utilized by both Miller and Kimball in reference to previous crisis experience is far too broad. The huge gap between traumatic and no trauma at all is too much of a jump. Surely there is some concept (or concepts) which can plug this hole.

It is hard to come to an opinion on Gruntfest's work. First of all, it is a working paper and not a finished paper. Secondly, on pages 14-17, she herself lists the biases and shortcomings of her study. She points out that: her sample is not random but is based on willingness to participate; young students are overrepresented in the sample; age and sex were not controlled for; and a reliance was placed on newspaper stories (a very unreliable source for disaster research). But then again,

the author admits this.

Kimball's and Miller's findings provide an interesting contrast to findings from the Buffalo Creek flood. Kimball and Miller discover much less psycho-physiological impairment in Colorado than was found in the Buffalo Creek disaster. Yet, as Kimball and Miller aptly point out, no one was trying to prove anything in Colorado. Hopefully, future attempts at mental health needs assessments can use Kimball's and Miller's findings as a comparison. Similarly, Gruntfest's results can be used to test hypotheses from previous research (she does this on p. 23) and to serve as hypotheses for future research. The studies can also be used by practitioners (be they

mental health workers or warning systems developers), for all three authors wrote with practical applications in mind.

In summary, these three studies confuse tabulation, categorizations and description with analysis and explanation. They are significant for the questions they raise, rather than for the analysis or answers they provide. Now that the problems have been identified, it is time to analyze and perhaps attempt to solve them.

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