

THE USE OF A CROSSCULTURALLY VALID LEVEL OF LIVING SCALE
FOR MEASURING THE SOCIAL AND ECONOMIC EFFECTS OF EARTHQUAKES
AND OTHER DISASTERS AND FOR MEASURING PROGRESS IN RECOVERY
AND RECONSTRUCTION AS ILLUSTRATED BY THE CASE OF THE
GUATEMALAN EARTHQUAKE OF 1976¹

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Introduction

Social science research on disasters is hampered by the lack of a commonly accepted measuring instrument for assessing the social and economic impact of disasters. A need therefore exists for a valid and reliable measuring scale through which the impact of disasters on human social systems can be measured. Furthermore, there is a need for an instrument that not only measures the impact of a disaster on the social system but which permits the monitoring of the recovery process as it takes place over time.

Even though physical science measures for assessing the impact of disaster agents are available, these instruments do not yield the kind of information necessary to social research. A Richter scale number, for example, does not furnish an indicator of the social and economic impact of an earthquake. What the social sciences need is a scale that measures the impact in terms of social indicators. In short, it must measure the impact of a disaster agent on a human system and must permit the measurement of recovery of that system as the reconstruction process takes place.

Ideally, what is needed is a scale which can be applied to many different kinds of disaster situations involving various kinds of disaster agents. It should be usable in measuring the impact of hurricanes, floods, tornadoes and earthquakes, and even man-made catastrophies such as wars, violent explosions and fires. In addition to being applicable to various forms of disasters, to be maximally useful, a social impact measure should have cross-cultural relevance.