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THE HEALTH CONSEQUENCES OF DEVELOPMENT

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INTRODUCTION¹

Development clearly has significant health consequences. In many cases it may improve the health of a village or a population. In other instances the demands for change come so fast and are of such magnitude that a population may be overwhelmed. As a result physiological, psychological, and behavioral impairments may begin to rise. We have all witnessed demoralized, unhealthy, apathetic people who have not been able to cope with rapid social change and as a result may never be able to participate in a growing economy.

Even where development has improved health, as in new village drinking water schemes or inoculations for contagious diseases, the demand to adapt to new medical and public health regimes puts an added load on a population, and this may have its adaptation costs. Social change requires adaptation, and thus does not occur without health impairments, as has been demonstrated in a number of studies from a variety of disciplines. But these have never been brought together into any coherent framework or theory. And therefore the amount of social change required before health impairments arise and the extent and duration of such health impairments have never been fully investigated.

Thus, the anthropology of development has two great challenges. First, it must devise a theory to explain why some populations can adapt to change with relatively few negative effects, while other populations are overwhelmed. This article is an attempt to sketch out the parameters of such a theory, which I term General Adaptation Theory. It attempts to incorporate all levels of response to demands for coping, the behavioral, the psychological, and the physiological.

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The second major challenge to the anthropology of development is to provide useful and uncomplicated guidelines for the administrator so that he can manage development and social change successfully and with a minimum of adaptation demands on a population.

The goal here is also to provide such guidelines. Consequently, we will try not to complicate the presentation by a discussion of the theoretical issues involved in General Adaptation Theory beyond what is necessary to serve as a background for such guidelines. (For those interested in further discussion of the theoretical issues underlying General Adaptation Theory, please see Appell n.d.).

To organize the various studies on health impairment associated with development and social change into a coherent framework or theory, I have

developed a series of interlinking postulates which serve as the basis of General Adaptation Theory. Under each postulate I present those studies that illustrate and support the postulate. This method has two functions. It should help direct further research to elucidate these postulates and their implications. And these postulates should serve as useful guidelines for administrators and development planners.

But first it is necessary to define the terms we will be using as "adaptation," "adaptation capacity," "adaptation load," "adaptation potential," and "adaptation overload."

DEFINITIONS

Adaptation

Adaptation is the continuing process of all organisms to achieve a better environmental-organism fit in responding to changes in their environment. Adaptation always involves the social world of which the individual is a member, and therefore it is useful to view adaptation as also a characteristic of a population.

Adaptation Load

The adaptation load is the sum of the demands placed upon a population to cope with changes in its external and internal environments.

Adaptation Capacity

Adaptation capacity is the total of the resources available to a population to respond to demands for coping.

Adaptation Potential

The adaptation potential for a population at any point in time is the net figure of adaptation capacity minus its adaptation load. This represents the resources that are available to meet further demands for adaptation.

Adaptation Overload

Adaptation overload occurs when the demands for coping are such that they overwhelm the adaptation potential of a population and produce various health impairments. There is a repertoire of responses to such demand overload, and these can include physiological, psychological, and behavioral dysfunctions.

HOW DO WE MEASURE ADAPTATION LOAD AND CAPACITY FOR ADAPTATION

The thesis of this article is that changes in the adaptation load on a population can be measured by the degree of health impairment. That is, by measuring the changes in the level of health in a population one can get a measure of how well it is adapting to social change. But how do we measure health? We take a broad view of health here, as our argument will show, to include not only physiological impairments but also psychological and behavioral impairments. Thus, if accidents rise or rates of divorce, stealing, or vandalism rise, these are indicators of a rising level of stress in the population as it attempts to cope with the demands of social change, and if this