ABSTRACT. Several aspects of time-budget methodology that are relevant to research on the activities of daily living by the aged are described. Most studies on the well-being of the elderly utilize data based on the number of activities, but the duration of the activities are not considered. This paper provides an overview of some of the salient research on time use studies and the elderly.

INTRODUCTION

Time-budget methodology involves the collection of data on various activities over a specified period of time such as the twenty-four hours of the day, weekend, or over the whole week. The data are essentially observations of what people do in time and space, and thus, they can be easily recorded at specified intervals by trained observers or by the survey respondents themselves. While this may appear to be quite simple and straightforward, the usage of time-budget methodology for the study of age-related behavior is a relatively unexplored area in social gerontology.

There are several reasons why a time-budget methodology has not been utilized in gerontological research. The first reason stemmed from the fact that the methodology required respondents to record their daily activities for the previous day based on recall, and for aged respondents, this created problems in both validity and reliability of the data because of their limited recall ability. This problem has been reduced considerably in recent studies (Ujimoto, 1985a) by having respondents record their activities regularly at their convenience throughout the day as they take place.

The second reason for the reluctance in employing time-budget methodology in studies on aging was based on difficulties in analyzing a plethora of data. Time-budget studies yield a very rich source of data about our research subjects. In addition to the information on the
temporal distribution of daily or weekly human activities, a time-budget methodology permits the researcher to obtain additional information on each of the activities such as duration, frequency, location of activities, the social networks involved, for example, kinship or friendship, and the sequence of events. Therefore, prior to recent developments in information technology and computer programs capable of analyzing vast quantities of data, researchers were understandably reluctant to collect time-budget data.

Another reason why time-budget methodology has not received wider recognition in research on aging stems from the vary nature of previous social gerontological research itself. Until very recently, specific hypothesis testing did not encourage the use of multiple measures of a given phenomenon. A good illustration of this can be found in those studies on life satisfaction or well-being of the elderly in which various activities in daily living were noted only as a single objective measure in terms of what people did. Other objective measures such as the duration, frequency, and sequence of activities, as well as the social environment in which various activities took place were not considered. Furthermore, the qualitative aspects of each of the activities were seldom addressed.

Finally, time-budget methodology can be a costly and time consuming technique for data acquisition if the research objectives are not very clearly specified at the outset. The research objectives should be grounded in gerontological theory and time-budgets utilized as a methodology to secure additional information on the phenomenon to be examined. In what follows, we will provide a very brief overview of earlier studies on activity patterns and well-being of the aged and indicate some of the limitations in these studies. We will then introduce several studies which utilize the time budget methodology to show some of its advantages particularly with reference to the multidimensionality of activity data.

**LITERATURE REVIEW**

While there is a growing body of literature on activity patterns and general well-being of the aged (Teaff *et al.*, 1978; Hoyt, *et al.*, 1980; Herzog and Rodgers, 1981; McClelland, 1982; Seleen, 1982; Moss and