

# **Time Use Research in the Social Sciences**

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# Preface

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Despite the fact that, for most of us, time is a central focus of our lives, the examination of what we do with our time and why has received limited attention as a method for understanding human behavior in the social sciences. Humans' view and use of time shows tremendous variation, including across cultures and with age, lifestyle, and gender. For many of us, a sense of time is ever-present. We speak of time as a commodity, a resource, an ally, an enemy, and a gift. It may be on our side, on our hands, with us, or against us. We perceive it to change speeds (dragging vs. flying vs. standing still) and lest it get away on us, we attempt to harness and control it with clocks, schedules, and deadlines. We describe our use of time in a myriad of ways: we spend it, save it, waste it, kill it, give it, take it, and grab it.

The impetus for this book grew from a three-day research symposium where established time use researchers from a variety of disciplines from Canada, the United States, Finland, Australia, and New Zealand gathered together to merge their knowledge and resources to collaborate in examining the relationship between human time utilization and health and well-being. We gratefully acknowledge the financial support for the symposium received from the Government of Canada's Program for International Research Linkages and M. Powell Lawton, without whose support and encouragement this book would likely not exist.

The purpose of this book is both to instruct and to demonstrate the use and variety of applications of time use methodology. It is multidisciplinary, multinational, and multicultural. The contributors are experts in their fields. Students of research in the social sciences will find that the breadth and detail of the text make it a particularly useful research resource. Similarly, the book will appeal to experienced research scholars who may

be less familiar with this particular methodology and its potential application to their research questions.

The first section presents information for planning and conducting time use research and the analysis of the data. In Chapter 2, Andrew Harvey discusses various important considerations and provides clear guidelines for sampling and diary construction, including how to include various subjective and contextual variables. Coding and file setup of time-diary data are critical steps in this research process and both are covered in detail in this chapter. Various analysis issues are then reviewed, including the calculation of descriptive characteristics of time use (duration, participation, activity sequences) and contextual features (deriving activity settings through the use of hypercodes, episode sampling).

In Chapter 3, John Robinson provides a brief history of the use of time use methodologies in Canada and the United States. He provides in-depth information regarding the reliability, validity, and limitations of various types of time use data. Multivariate analysis is then outlined and the examination of contextual variables is demonstrated.

William Michelson, in Chapter 4, focuses on less conventional applications of time use research. He illustrates how time use data and associated contextual information can be used to try to understand and explain how human's everyday contexts impact on their time use. Examples are given, including the influence of physical environment contextual variables (housing, neighborhoods, urban infrastructure) on socialization and understanding working mothers' time use by including subject emotion variables (perceived tension, perceived control, perceived available time or "busyness").

The intent of the second section is to expose readers to the wide variety of existing applications of time use methodology and, we hope, stimulate researchers' thinking and awareness of how the methodology may be a valuable tool to apply for answering their research questions. In Chapter 5, Powell Lawton, long recognized for his work in gerontology, discusses the unique issues and considerations when applying time-budget methods to research with the elderly. He then gives detailed guidelines and illustrations of the use of time budgets to understand the elderly's psychological perceptions of time use and its influence on their life satisfaction and well-being.

Time use data are powerful illustrators of role behavior and lifestyle. Examples of such illustrations are discussed in Chapters 6–8. Jiri Zuzanek and Bryan Smale describe how they used time use data to examine the relationships between life cycle, daily time use, and weekly rhythms of everyday life. In Chapter 7, Joseph Tindale examines the temporality of family and the life cycle and the adaptations people must make to different

stages. He outlines the changes in the meaning of time that result from the impacts of various life-cycle events such as employment, unemployment, and becoming a parent. In Chapter 9, Wendy Pentland and Mary Ann McColl discuss important considerations for conducting time use research with persons with disabilities and provide an example of research comparing time use between persons with, and those without, severe physical disabilities.

The impact of culture on lifestyles and behavior can be examined with time use methodologies. Chapters 9–11 provide examples of time use research from Australia and New Zealand, and with elderly people from ethnic minorities. Ann Wilcock discusses the influence of biological necessity and sociocultural influences on our use of time and considers the potential benefits of applying quantitative and qualitative methods to the understanding of human time use.

Each culture has its own view and concept of time. This is an essential consideration before planning to conduct time use research in countries where routines and the time of day are marked not by clocks and minutes, but by the sun, the moon, the tides, or body needs (hunger, fatigue). Time use data collection methods should be considered ethnospecific in that techniques that work in one culture may fail miserably in others unless major methodological modifications are made. Chapter 10 by Gail Whiteford and Mike Barns clearly illustrates this issue. In their chapter, the meaning of time both now and prior to colonial contact is presented from the perspective of the Maori, who are the indigenous people of Aotearoa (New Zealand). They outline the inherent dangers in applying traditional time use data collection techniques across cultures and suggest recommendations for methodological modifications.

In Chapter 11, Victor Ujimoto also addresses cross-cultural issues related to time use research in gerontology. Examples of issues and refinements are given through the presentation of a number of his studies examining aging of persons from ethnic minorities in Canada. Jerry Singleton, in Chapter 12, provides an example of the application of time use methods to a very specific population; leisure behaviors in the elderly and those with Alzheimer's disease. Cognitive deficits in this latter population present significant challenges to data validity and reliability and the reader will find the strategies outlined very useful.

Finally, in Chapter 13, Pentland and Harvey outline the current issues, challenges, and future trends for time use research. The intent of this final chapter is to allow readers to put what they have learned about time use research into context and see both its strengths and those areas where time use research needs to develop further.

We hope that this book will clearly show the unique, adaptable, and



cross-discipline applications of time use research methods and provide readers with the basics to begin research with this method. It is our belief that as we learn more about the complexity of human behavior, individually and socially, time use research techniques will become an increasingly invaluable tool that researchers in the social sciences cannot overlook.

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