

Theory Construction and Model-Building Skills: A Practical Guide for Social Scientists By James Jaccard & Jacob Jacoby, 2010. New York, NY: Guilford. \$31.19

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In the latest addition to Guilford's Methodology in the Social Sciences series Jaccard and Jacoby offer a useful exposition of theorization for the novice social scientist in their recently published book titled *Theory Construction and Model-Building Skills: A Practical Guide for Social Scientists*.

The content is well suited for the advanced undergraduate or beginning graduate student as it demystifies the process of building theories and models. The authors clearly and informally explain the fundamentals of theory construction in an effort to present a practical, applied method of theory development. Strategies to clarify theoretical concepts and spur conceptual creativity are craftily imparted via thoughtful explanation and comprehensive examples.

Organized into four sections, the book opens with basic conceptual building blocks and then moves into more complex aspects of constructing models and theories. The authors begin by introducing the underpinnings of theory construction in the abstract and guide the

reader through understanding the subject's foundations and multifaceted nature. Each chapter contains a listing of key words, extensive suggested readings, and questions for review. Appendices that further explain robust subject matter follow the more daunting chapters.

Part I of the text introduces the nature of understanding and science as an approach to understanding. It covers the expected discussion on the nature of reality and its significance in scientific thought. The authors advance the topic with the introduction of concepts, how the relationships between concepts compose a conceptual system, and the importance of communication in accurately conveying the symbols of conceptual systems. The reader is subsequently launched into their presentation of science as a conceptual system by which to generate theories.

Part II contains the core processes of theory construction including idea generation and creativity, focusing concepts, and the use of thought experiments as a means to clarify relationships among phenomena. Creative

processes are covered in excruciating detail, yet include fascinating morsels on how great creative minds, such as Einstein and Freud, generated theories. Additionally, the authors provide a listing of twenty six fully detailed heuristic suggestions that readers may employ to spur creative thought in the theorization process. For clarifying theoretical concepts, the writers encourage the use of thought experiments and contingency tables. This part provides the reader with the basis for understanding compound issues.

Part III takes the reader through a detailed explanation of various theoretical frameworks including causal modeling, mathematical modeling, simulation as a method for theory development, grounded and emergent theory, and systems of thought that largely influence theory construction. The chapter on causal models provides the reader with an intricate description of potential types of causal relationships and develops into a step-by-step strategy for building causal models. Mathematical modeling is conveyed with reverence to its vastness, while simultaneously providing novice readers with a general sense of how to think mathematically and build mathematical models. The authors artfully present theory development in the context of each framework while clearly describing the differences in perspective that make each distinct. Thus, communicating to the reader their import and usefulness.

The final section, Part IV, deals with some overarching and closing concerns of theory construction such as what to look for when reading about theories and the role of theorizing in science, various scientific paradigms and careers. Readers are instructed on the proper ways to present theories in writing, including how

statistical representations of theories should be presented. Additionally, the authors direct students on how to become successful candidates for assistant faculty positions during their fourth year of doctoral study. They suggest that student's research and publish during the first three years of their doctoral program. Furthermore, the authors offer a program of self-study on various topics for all social science students so that their "theoretical toolbox" remains current.

Overall, this text is encompassing and insightful. It embodies the conceptual tidbits discussed and learned throughout graduate education on theory construction. The authors rightly impress upon the reader the pressing need to think creatively, systematically, and constantly when attempting to develop sound theories and models. The detail, depth, and fullness of the explanation and examples contained in this volume may be too much for advanced graduate students, however, the beginning graduate student should find the descriptions and heuristic prompts quite informative and advantageous. Even so, advanced graduate students and seasoned social scientist alike will find this volume a useful reference for some of the conceptual groundwork and approaches to theorizing and model building.