GABE T. WANG and KEUMJAE PARK



STUDENT RESEARCH AND REPORT WRITING

From Topic Selection to the Complete Paper

WILEY Blackwell

Student Research and Report Writing

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This edition first published 2016 © 2016 John Wiley & Sons Ltd

Registered Office John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial Offices 350 Main Street, Malden, MA 02148-5020, USA 9600 Garsington Road, Oxford, OX4 2DQ, UK The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

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Library of Congress Cataloging-in-Publication Data applied for.

Hardback 9781118963906

Paperback 9781118963913

A catalogue record for this book is available from the British Library.

Cover image: © Stuart Dee / Getty

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Acknowledgments

During the process of writing this book, many people have helped us in various ways. We deeply appreciate their help. First, we would like to thank the anonymous reviewers who have provided us with many insightful comments and constructive suggestions. These comments have inspired us in various ways and we have incorporated many of their suggestions in our writing. It is these comments and suggestions that have improved the quality of this book.

Second, we are indebted to several colleagues at William Paterson University of New Jersey, who provide feedback on our manuscript at various stages while we were writing the book. Professor Peter Chen at the Department of Mathematics provided good comments and suggestions for Chapter 9. Anthony Joachim at the Cheng Library offered many valuable suggestions for Chapter 3. We thank Professor Carol Frierson-Campbell of Music Department for her constructive comments on Chapter 1. Special thanks are also extended to Professor Mary Chayko of Rutgers University, and Professor Janet Ruane of Montclair State University. Their reviews of multiple chapters of our manuscript were instrumental in shaping the book the way it is now.

Finally, we would like to thank the wonderful staff at Wiley. Our editor Justin Vaughan has been most supportive and patient throughout the entire process. Our project editor Ben Thatcher has guided us through the final stages of manuscript preparation and the production process. Lisa Sharp has provided help with many administrative issues.

Our deepest gratitude goes to our families for their love and support.

About the Website

The companion website for Student Research and Report Writing: From Topic Selection to the Complete Paper includes a number of resources created by the author that you will find helpful.

Please go to:

www.wiley.com\go\wang\researchreportwriting

For students:

• Links to online video resources

For instructors:

• PowerPoint lecture slides

Chapter 1 Introduction: Start Your Research Journey

If you have picked up this book, you are likely to be a student of the social sciences, business, or education. You may be thinking about original research for a major paper, for an undergraduate seminar class, or for a bachelor's or master's thesis. Or you may be in a practicum course in social science research and writing (often called "Senior Seminars" in many U.S. universities). You probably have already learned about different theories and have taken research methods courses in your discipline. Perhaps, you feel that you know a fair amount about research terminology, but you might not have had practice designing and carrying out original research of your own. Or you may be simply overwhelmed by the magnitude of the work ahead and do not know exactly where to start. You know what you need to produce in the end but are anxious about how to get it done. If this is the case, this book is for you.

Conducting social science research is a journey that requires a step-by-step blueprint and a time-management plan. Most people today rely on a GPS (Global Positioning System) device or internet map services when they drive to unfamiliar locations. We hope this book works as your GPS research guide, a one-stop shop of practical help for you in each step of your research project, from coming up with a research topic to completing the report. Most chapters provide you with exercises corresponding to each research phase, which will help you complete the work effectively, and work out solutions to problems you may have.

What Is Research?

Before you get on the road, let's first talk about the definition of the term which we will use throughout the book. What is research? These days "research" has become a part of our everyday life. For example, when you ask someone in business about a new product or a new service, he/she may reply, "let me research that for you." As a consumer, you do research on a daily basis, whether it is the price of a car, which tablet device to purchase, or opportunities in the job market. In these cases, research refers to gathering available information so that you may make informed choices. The use of the internet has made this practice so common and routine that even children search for toys on the internet and compare various gadgets they can find before asking their parents to buy them.

On other occasions, you may be asked to do "formal" research that involves more systematic and conscious processes of gathering information, careful evaluation of evidence, and a methodical synthesis of the information gathered. Examples include doing research for term papers in undergraduate and postgraduate courses, writing a thesis to satisfy a requirement of a bachelor's or master's degree, or writing scholarly papers for publication or conference presentations. Or at work you may be asked for a market analysis or a needs assessment. The main difference between the casual everyday research you do as a consumer and the more formal research is the extent of the information to be considered and the methods to be employed in analyzing the information. For the everyday research, you may look up a few pieces of information you can easily find on the internet or from a few people around you; but more formal research will require you to examine issues thoroughly and draw careful conclusions. Formal

research requires systematic methods of investigation and a critical analysis of evidence to discern credible and notso-credible knowledge.

We will use the term "research" with specific meanings in this book and we want to clarify it here. When we refer to "research," it will involve: 1) questions that are academic in nature and advance a scientific understanding of human society or human behavior; 2) systematic and evaluative screening and collection of information on a topic; and 3) tasks of systematic and careful data analysis and reportwriting. It is the type of research that students conduct for educational purposes and to gain and produce knowledge in academic settings.

Box 1.1 What Is Research?

In this book, we will focus on the following type of research:

- Asking questions that are academic in nature and advance a scientific understanding of society and human behaviors;
- Requiring systematic and evaluative screening and collection of information;
- Involving systematic and careful data analysis and report-writing.

Today, there is a growing expectation for student research. Students like you are often trained and required, as part of the university curricula, to conduct research and write papers or theses that meet the professional standards of the discipline. A good reason behind this trend is that research skills are increasingly expected in the workplace worldwide. Doing empirical research enables you to acquire many valuable skills. It requires you to raise appropriate questions; assess existing information; set goals and make plans to meet the goals; collect, analyze, and interpret data; and use data in a meaningful and appropriate way. The process requires systematic project management skills to allocate time, resources, and handle unexpected problems. Your research experiences will provide you with rich, in-depth learning, which many of your future employers will highly value. With advances in technology you have greater access to the tools of field research and to a broader population whom you can engage in your research. The continuing efforts of colleges and universities to establish networks with professional and local communities are increasing opportunities for your learning experiences in the real world.

What Type of Research Project Do You Have?

We have designed this book to guide a journey of an empirical research, mostly involving observations and analysis of empirical data. Empirical research is an effective way of doing research and it is widely employed by social scientists, especially in North America. Empirical research is often based on the principle of positivism, or the pinning down of social world into tangible data and reasoning with them to explain social phenomena. But other empirical research is rooted in different traditions; for example, anthropologists often analyze their empirical data through interpretation of qualitative (narrative) data, instead of quantitative data. Your particular research will be guided by requirements of different research methods, depending on the nature of your assignment/project; some will involve empirical research of various types, and others may be mostly based on bibliographical research. Though

not an exhaustive list, some possible types of assignment you may have are the following:

Empirical Research Project with Original Data Collection

Your project may require a collection of original empirical data. Empirical research projects can vary in their scope and magnitude. They range in lengths, from thirty-page journal article style papers to book lengths projects such as doctoral dissertations. Regardless of the scope and lengths, empirical research projects follow a similar process. There is a truly wide range of different kinds of empirical research project as we will discuss in chapters of this book. They may use numerical data or text data. They may use large or small sized samples. They may focus on one group or setting, or on the general population. Regardless of the styles, a successful empirical project will depend on clearly defined topics or problems, thorough and careful reviews of the literature, well-planned research methods to ensure validity and reliability of the data, proper applications of analytic techniques, and careful interpretation of the results of the analysis.

Empirical Research Project with Secondary Data

Everything mentioned above is also applicable to empirical research projects using secondary data, except that this latter uses data already collected by someone else. Thus, your task will include locating and extracting most suitable data sets for your project, instead of designing original sampling and data collection strategies. Using secondary data has its advantages and disadvantages. When you use secondary data collected by government agencies or large institutes, you are likely to work with data obtained from large representative samples; this will increase your ability to generalize the findings from your study to a larger population. One of the main disadvantages of using secondary data is that the variables in the data set may not be the perfect measures for the themes and concepts you wish to investigate. Whether you can use secondary data for your project depends on the requirement of the assignment given to you. You should consult your project supervisor or faculty mentor before you make your decision.

Synthesized Literature Reviews or Review Essays

Some of you may work on an assignment based on bibliographical research without a requirement for empirical data collection. If it is the case, your assignment may be literature reviews. Many undergraduate course assignments are different versions of literature reviews. Synthesized literature reviews provide a comprehensive and organized overview of the studies focusing on a topic area in social sciences. For this type of assignment, you need to identify the relevant literature, review the studies carefully, and produce a synthesized assessment of the field of study. A successful execution of this type of assignment depends on 1) the quality of information search which successfully identifies the right range of relevant literature and produces a near-exhaustive list of the literature on the topic, 2) your ability to evaluate the studies' validity, relevance, and significance in the subfield, and 3) your ability to create an organized report, or synthesis which delineates agreements and contradictions, well-explored themes and overlooked ones, over-studied population and under-studied ones, and tested and un-tested theories. A good literature review project can also suggest research directions and questions to explore further, based on the "gaps and voids" identified in the existing literature.

Theoretical Essays

Theoretical essays are somewhat different from literature reviews, as they aim to do more than synthesize what is known, but to extend theoretical ideas further. Theoretical projects are primarily based on bibliographical research, just like literature review assignments, but they will focus on theories and theoretical concepts in the literature. For successful theoretical projects, you will not only need to have a comprehensive understanding of related theoretical traditions, but also be able to reflect and evaluate clarity and usefulness of theoretical concepts, internal logic of theoretical claims, and the applicability of a theory in light of social reality. Theoretical essays typically do not require empirical data but they use examples from empirical reality or cite results from empirical studies to support and illustrate particular theoretical points.

Not only may your projects be of different kinds of assignments, but also they may ask fundamentally different kinds of questions. Today, social science research is guided by a multitude of different perspectives and philosophical traditions, and increasingly becomes diverse and interdisciplinary. This means that the research methods and the process of deciphering meanings and uncovering theories have become more malleable and creative. There is still a common emphasis on systematic exploration and investigation into the inquiry. Consider the two major paradigms or perspectives below, which have influenced social sciences, and find out which approximately approach your own project ideas.

Positivism

Social sciences have come a long way since the earlier days of Auguste Comte (1798–1857) who was committed to the enterprise of discovering "scientific laws" to explain human history, or Max Weber's idea of excluding emotions or value-judgments (except for when choosing problems to investigate) in social science investigations, which some people call "instrumental positivism" (Bryant 1985: 137). But the influence of positivism is clear in many research projects, in their assumption that observations using tangible and measurable measures are the foundation of knowledge and that they can accurately reflect social reality. The importance of measures, or the emphasis on validity and reliability of measures, as a way to uncover "objective" knowledge, is implied in a lot of investigative traditions in social sciences, especially in quantitative studies. In this tradition, research projects are likely to assume that there are pieces of social reality that are "out there" to be discovered, attempt to develop measures to capture those pieces, and examine what parts of social reality cause another.

Constructionism

The constructionist view is very different from the positivist view in that it views social reality and human conditions as something produced, created, and "constructed" by members of society. Rooted in epistemology, or the study of knowledge formation, constructionism in social sciences focuses on uncovering meanings in human activities and social reality. According to this tradition, social reality is always in motion, and it is experienced differently by different individuals. Therefore, research in this tradition strives to describe what people experience from their own perspectives, while carefully focusing on the meaning people give to their experiences and observations. Constructionist views are found in several different methodological traditions, including hermeneutics, phenomenology, and anthropological "thick descriptions" (Bernard 2002).

It is impossible to produce all-encompassing guides for the variety of assignments you have; we believe this speaks for

the diversity within social science research and the potential of creative and yet systematic research. What we attempt to lay out in this book is a guided road map, focusing on the *principles of systematic and organized investigation*, which you can use creatively and flexibly to suit the purpose of your unique research project. Furthermore, this book will focus on the practical problems of your research.

What Are the Procedures for Scientific Research?

The premise of social sciences is that a systematic investigation ensures our chance of obtaining accurate knowledge about social reality. Formal research using scientific methods usually follows common step-by-step procedures. These procedures ensure high quality research and valid and reliable findings. The flow chart below illustrates the common procedures of social science research.

As you can see in the diagram, the systematic research process begins with a carefully selected topic followed by a thorough and critical review of existing knowledge on the topic, a process we call "literature reviews." At the end of the literature review, you will be able to find a "niche" or some themes and questions about your topic that you feel you need to investigate further. These will become a set of specific hypotheses or research questions for your study. Then, you may design your research, a process which includes careful planning of the sample size and sampling methods, decisions on data collection methods (e.g., questionnaire surveys, experiments, in-depth interviews, or participant observations), construction of measures for the concepts, and ethical concerns for safeguarding your participants. You will then put all of these plans together into a research proposal. If your research involves human subjects or animals, it should be approved by the committee in charge of reviewing research ethics. Of course, your research proposal should also be approved by the professor, tutor, or supervisor with whom you are working. You will then collect data according to your research design. After collecting data, you will analyze and summarize them and write a report or thesis to share your findings. *Student Research and Report Writing: From Topic selection to the Complete Paper w*ill follow these steps and guide you to complete a quality research project and finish writing your report or thesis.

Will There Be Bends and Detours in the Research Process?

As it is often the case with real life travels, research journey is not neatly streamlined like the above diagram. The diagram is meant to illustrate what it is like to take a systematic approach to a query, if you wish to pursue valid and reliable answers to your guestions. But, even in this systematic approach, your research journey in reality will be bumpy and messy. Just like a real life journey with roadblocks and traffic jams, you will encounter difficulties, problems with no clear answers, and changes and dead ends in your thinking. You may begin with an idea but as you read and investigate more, you may find yourself steering toward new directions. Consider that there are many different alternative routes to reach a destination; some of the detours may actually bring you back to where you started! Don't feel defeated if this happens; we assure you that these are frequently and naturally occurring aspects of social science research. Remember that, even if you are at the starting point again, you now have many more insights which you gained during your detour. This is

why people consider research as an "iterative," or repeating, process. It is also reflexive, as you will constantly make adjustments to your research plans in light of new issues you learn in the process of research. In fact, research you do as a student will look more like <u>Figure 1.2</u>.



Figure 1.1 Process of Scientific Research.



Figure 1.2 Iterative Process of Social Science Research.

How to Embark on Your Research Journey

When you engage in a research project, you set out to explore a curious social phenomenon, start getting information to answer the questions you have, or verify a theory that you have learned. Here we compare research to

a journey; it is a path to the unknown and an exciting process of discovery. Like a journey, you will need some background information to decide on a destination (i.e., select a topic), prepare a road map and a plan (i.e., write a proposal of your research designs), and make observations during your journey (i.e., collect data). You are likely to have some type of log or chronicle when you travel, such as photographing, blogging, or writing in a journal, and in the end, you will probably want to share with other people what you discover and experience. Likewise, you may write research journals to keep records of your study, and are most likely to write a report at the end of your research to share your findings with other students, colleagues, or your faculty mentors. Just as you need to pack your suitcases for a journey, there are a few things you may want to have before embarking on a research journey.

Curiosity

Research starts with a desire to learn about something new or to better understand a complicated problem or social issue. Your research will typically start with a question or set of questions. Questions in social sciences frequently involve the causes and consequences of a social issue or a pattern of human behavior. For example, what causes some students to drop out of high school? What programs are effective in helping children eat more fruits and vegetables? Why does random violence occur? What factors allow some people to feel happier than others? How can we better counsel people with suicidal thoughts? How can we bring clean water into remote villages in sub-Saharan Africa? Are there effects of the "digital" gap between children of higher income families and lower income families? What programs will help girls to stay in school in rural areas of Pakistan? Why are public opinions on the death penalty different in different countries?

Questions like these are rooted in your interests in patterns of human behavior, social phenomena, and the relationship between different aspects of society. Other questions concern ways to improve people's experiences or the effectiveness of social programs and institutions. Other times, you may be curious about new patterns of activities and trends in society. All these issues are fine research topics. An inquisitive mind and an interest in exploring the unknown are probably what will trigger your research. Your personal interests and passion for a question is very important prerequisite for the research journey. Keep in mind research requires constant questioning and probing along the way. Curiosity is something you will carry with you throughout your research journey.

Research Skills

We assume that you have already received some training in social science research skills and have learned the procedures for conducting research, including reviewing the literature, constructing research questions or hypotheses, designing ethical and methodical research plans, collecting and analyzing data. You may have taken research methods or data analysis courses but may have forgotten some of what you learned. You will need to dust off your knowledge and research skills and be ready to apply them to a real life research setting. In this book, we want to refresh your memory on the research methods, and help you further to navigate the process of research and resolve the practical problems you may encounter.

If you extend the metaphor of journey and think of the typical research methods and data analysis books as more comprehensive series on the different methods and destinations of world travels, this book will serve as your on-the-spot guide book. Like a travel guide that follows the different steps of your journey – how to get from the airport to downtown, which hotels are in your price range, or what sights are must-sees – this book will provide you with help when you come to a difficult point of your research journey or when you are likely to get lost. We hope that you will find in this book some specific information on practical problems, which you may not find in general methods and data analysis texts.

Since there are some basic terms we need to use throughout this research guide, we summarized in Box 1.2 a few "must-know" terms in social science research.