



Research Design & Statistical Analysis in Christian Ministry

5th Edition
2015

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Dedication

Dedicated with appreciation for the administration of
New Orleans Baptist Theological Seminary
— *President Kelley, Provost Lemke, and Division Chair Stone* —
for supporting the value of scientific research
under the Lord’s admonition to use “fair weights and measures”
(*Lv 19:36-37; Dt 25:13-16; Pr 11:1-3; 16:11; 20:10, 23; Mi 6:11*)
in the evaluation of Christian education ministry
in local churches and denominational agencies.

Dedicated with gratitude to the
students of
Southwestern Baptist Theological Seminary (1981-2012)
Who helped shape this text over the years
and to the

Students of
New Orleans Baptist Theological Seminary (2015-)
and elsewhere around the world
who will use these tools to evaluate the effectiveness of our
Work in the Kingdom,
‘til Jesus comes

Research Design and Statistical Analysis in Christian Ministry

William R. Rick Yount

5th Edition

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Preface

Fifth Edition

For [31 years](#), 1981-2012, the material in this book introduced students in the School of Religious Education (*aka* Educational Ministries, *aka* Church and Family Ministries), Southwestern Baptist Theological Seminary, to the fundamentals of scientific research and statistical analysis.

The School of Religious Education pioneered quantitative research design and analysis in the [1970's](#) under the direction of [Dr. Leon Marsh](#), Foundations of Education professor and long-time chairman of the Advanced Studies Committee. I took classes in research design and statistics from Dr. Marsh as a master's (1975) student, and from Dr. Jack Terry, Dean of the School, as a doctoral (1976) student. The School's faculty discussed strengthening the use of research and statistics by doctoral students in the late 1970s. In 1980, they established a full-time faculty position to help students produce credible, empirical, and practical solutions to contemporary problems in local church educational ministry.

These actions led to a meeting in January 1981 with Dr. Marsh, Dr. Terry, Dr. John Newport, Provost, and Dr. Russell Dilday, President. The result was an invitation to join the Religious Education faculty as Instructor, Foundations of Education. In addition to research and statistics, I taught principles of teaching, philosophy of education, and later, when Dr. March retired, educational psychology. I was approved by the Trustees in March, and taught my [first research course the fall of 1981](#).

In the early years, the general faculty response to a student question about design or analysis was "Go ask Yount." But over time, faculty members became fluent in the scientific languages of research and statistics. Graduates became faculty members. After 30 years, every member of the PhD Committee spoke fluent R&S. Doctoral students were consistently nominated for awards based on the depth and scope of contemporary research into issues facing local church ministries.

The courses I taught in research design and statistical analysis at Southwestern came to an end with my [retirement on July 31, 2012](#). Students in the pipeline were allowed to finish their quantitative and qualitative studies, but all new research proposals in the School are required to use philosophical or historical approaches.

In [June 2012](#), [Dr. Bob Welch](#), chair of the CE Division at New Orleans Baptist Theological Seminary, learned of my impending retirement and asked if I would be interested in teaching at NOBTS. The next week, I interviewed with [Dr. Steve Lemke](#), Provost of

NOBTS. Later that summer, I received a warm letter of welcome from [President Chuck Kelley](#), along with a one-year, renewable appointment as [Visiting Professor of Christian Education](#), effective August 1, 2012.

During the [2013-2014](#) school year, a new [Doctor of Education degree](#) was established at NOBTS. Two new courses were designed, one for preliminary work on the Master's level, and a second for advanced training at the doctoral level.

[Ed.D. applicants](#) will begin using this text in [February 2015](#) to learn the foreign languages of research design and statistical analysis, the languages of choice for those called to serve the Lord in educational ministry: witnessing, teaching learners of all ages, organizing, leading, and equipping, that the “Body of Christ may be built up” [matured], so that we all “grow up into Him Who is the Head, even Christ.”

Scores of evangelical schools and professors have used the 4th edition of the text – available for years as a free download from www.napce.org/resources -- in their courses on research in educational ministries.

This edition is a work in progress, being updated for my new work at NOBTS. I am deeply grateful, first to the Lord, and then to the administration of NOBTS, for the opportunity to [continue in my calling from the Lord — to forge Christian researchers](#) who will add to our effectiveness in the teaching and administration ministries of the church

Most of the references in the text are from the 1980's. These have not been updated for the 4th or 5th edition. The fundamental concepts explained here in this text have not changed, and I see little advantage to spending months finding quotes in newer books just so I can change the references.

May God bless you, [dear student](#), as you use this material to master the art and science of data collection and analysis—for His Kingdom's sake!!

W.R.Y.

January 2015

Preface

Fourth Edition

For [nineteen years](#), material in this book has introduced students in the School of Educational Ministries, Southwestern Baptist Theological Seminary, to the fundamen-

tals of scientific research and statistical analysis.

The book was written at the [request of students](#) who, at the time, used two published texts -- Borg and Gall's massive Educational Research 4th ed., and George Hinkle's Basic Statistics. Together, in 1986, these books cost \$90. What students asked for was a [more economical, and more focused](#), text which covered the material in the course. The 1st edition was written during my first sabbatic leave -- 1986-7. The three-ring bound text contained over 500 pages (including two sample research proposals) and cost, after bookstore mark-up, \$54.00. While this was a great savings from the \$90 students formerly paid, and the book focused student attention on essentials of the course, students were not happy to pay \$54 for a book in a three-ring binder! The 2nd edition trimmed down the size of the text, and, as a result, the cost was reduced to \$35.

Policy changes regarding faculty-written materials in the early 1990's moved the distribution of the text away from the bookstore, and into the seminary print shop. Students paid for the text by means of a course fee. Cost of the book was reduced to \$26, which included a penny per page for the author. The [3rd Edition was an extensive re-write](#), with new diagrams and explanations. Policy changes in 2005 led us to place these materials on the seminary's Blackboard web site for the free use of students. Returning to secular texts today would cost students nearly \$200 (and Christian publishers are not interested in a book on design and analysis!) So you find these materials on Blackboard!

The 4th Edition [remains a textbook](#). It has not been re-formatted into a web-friendly appearance. Some color has been applied to highlight key ideas, but the materials are still meant to be downloaded and printed -- to be used as a written text. All known typos and errors in the 3rd edition have been corrected. The extensive [Table of Contents](#) is, in itself, a tool for organization and review.

You will note that most of the [references in the text are from the 1980 s](#). These have not been updated for the 4th edition. Perhaps in another lifetime... [These fundamental concepts have not changed](#). The purpose of the text remains the same -- to provide insight into the languages of research design and basic statistical analysis, to frame your construction of a research proposal, and to reinforce your critical thinking skills.

[May God bless you as you use this material to master the art and science of data collection and analysis -- for His Kingdom s sake!](#)

W.R.Y.
December 2005

Preface

Third Edition

Therefore go and make disciples of all nations,
baptizing them in the name of the Father and of the Son and of the Holy Spirit,
and teaching them to obey everything I have commanded you.
And surely I am with you always, to the very end of the age.
(Matt 28:19-20, NIV)

We are therefore Christ's ambassadors,
as though God were making his appeal through us.
We implore you on Christ's behalf: Be reconciled to God.
(2 Cor 5:20, NIV)

We send missionaries -- ambassadors for Christ -- around the world to preach and teach the Gospel. They give themselves to learn the language of their people group, not only to communicate words, but to communicate their heart, and to establish credibility in themselves and their message.

There is a people group in our society who speak a foreign language, who write and publish and conference together in their language. A people group that, perhaps out of our own fear and prejudice, remains outside our missionary sphere. Many in this people group need the Savior, but their philosophy and perspective make them difficult to reach. They are **the people of secular science**, and the language they speak, the language they trust, is research.

Every year thousands of research articles appear in journals around the world. Most of these articles are written by people of secular science who view the world through secular eyes. **Their marketplace of ideas has limited input from Christians who do not speak the language of science.**

Go and make disciples of all nations. . . . Learn the language. Learn the people. Be an ambassador in their marketplace of ideas. Help them to see that science embraces all creation, but that faith embraces the Creator. Study your world objectively and communicate your findings credibly in the language of science, from a heart of faith.

This text is dedicated to helping you learn the language. To study the world. To dialogue in science's marketplace. To share the Gospel on the journey.

W. R. Y.

June, 1999

Preface

First and Second Editions

A Fable From Far Away

Long, long ago, in a land many leagues from where you now reside, there existed a kingdom dedicated to the doing of Radishch. While all the people of the kingdom knew the value of good Radishch, only a few of the very best were admitted to apprenticeship. Apprentices -- subjected to rigorous training and arduous testing -- eventually mastered their craft, and became the Knights of the Normal Table. It would be they who would protect the quality of Radishch, the kingdom's primary contribution.

The Whiteheads among the Knights remembered the early years, when training in the arts of Radishch were subject primarily to the notions and guesses of the apprentices themselves. The divers kinds of arts, potions, spells, charms, and amulets were discovered in a hundred different scrolls, almost in happenstance fashion. Links between this potion and that charm or this amulet and that spell were discovered through reading, or festive talking among the apprentices, or in some of the many recitations offered by the Masters of Radishch.

Apprentices would often put together what they considered an excellent treatise on some aspect of Radishch, only to find it did not include this element or that ingredient. Treatises varied greatly among the young apprentices, and even though many went on to become Knights of the Normal Table, others held that there must veritably be a better way to insure quality Radishch.

So to the kingdom was brought by the Masters a young knight, who was given the task of gathering together in one place the main elements and ingredients, the most popular potions and charms, the various amulets and spells, that lie scattered over the kingdom. This young Knight was also empowered to train the apprentices the art of Radishch, and to test them in order to verify that the apprentices did indeed know from whence they spoke.

Year upon year the young knight did work, gathering together in one scroll of scrolls all that apprentices should know and use in the art of Radishch. Finally the great scroll was completed. But alas, it did weigh a quarter-stone and cost the apprentices nearly a half-fortnight's wage.

"Dost thou mean we must learn all that is contained within these broad-leafed pages?" they asked (for they did not have knowledge of the exceeding frustrations of the White-heads, who spent many more hours and many more farthings gathering the scattered wisdom for themselves).

And the young knight said, "Yea, verily, it was for this reason I was brought back to the kingdom. If you will but put your minds to mastering this one scroll, you will possess the elements and ingredients you will need to master Radishch, and become a Knight of the Normal Table."

Some did not believe the young knight, for he was perceived as having an unfair advantage. And so they did not study, nor did they toil. Rather did they gather and murmur at the heart-felt unfairness of the kingdom, and especially of the knight, who had written the scroll of substantial heftiness.

Many, however, did heed the words of the young Knight. Verily, they did immerse themselves in the waters of the scroll. They did cover themselves with the elements and ingredients of the book, until they began to see a world open to them they had never seen before.

The treatises they did write were approved by the Masters with adulation. The Radishch of the kingdom continued to prosper. And the new Knights of the Normal Table went forth to produce Radishch in a way none had seen before in the collective memories of the elders.

...

So the moral of this fable is,

If you could stand on the other side of your thesis or dissertation and look back, you would see the value of this book in a way you cannot fathom at this moment.

Trust me.

This textbook has grown out of my experiences as a student and as teacher. As a student, I struggled with the myriad problems and obstacles one faces when writing a dissertation proposal. [What should I study? What approach should I take? How do I prepare to defend my proposal before The Committee?](#)

I have done all of this twice -- once for the graduate faculty of the School of Religious Education at Southwestern (Ed.D. 1978), and again for the graduate faculty of the School of Education, University of North Texas (Ph.D., 1985). Time after time I found myself groping in darkness for help.

As a teacher of research and statistics, [my aim is to prepare you to handle the entire process of problem selection, research development, proposal organization, proposal](#)

implementation, and data analysis. I have not been satisfied with existing texts. "This one" focuses on research design while "that one" focuses on statistical procedures. Never do we need to cover all of the material in either text, but we do need to use large portions in both. Requiring students to purchase two books (costing as much as \$90) and then ignoring multiple chapters from both of them never appealed to my sense of fair play.

This textbook addresses fundamental questions of how we come to know about our world. It provides a clear and structured view of the research design process, especially as it relates to the study of Christian ministries. It relates statistical procedures to the kinds of data you may choose to collect. It provides helpful suggestions from a "from-one-whose-been-there" perspective.

W. R.Y.

August 1988

About the Author



Dr. William R. "Rick" Yount is [Visiting Professor of Christian Education at New Orleans Baptist Theological Seminary](#), where he has served since [August 2012](#). He teaches workshops and seminars in Teaching the Bible, Educational Psychology, and the History, Philosophy and Theology of Christian Education.

Since [1996](#), Yount has travelled to various republics of the [former Soviet Union](#) to teach pastors and missionaries principles of teaching and learning.

Yount and his [wife Barbara](#) were married in [1969](#). Barb teaches American Sign Language at [Texas Christian University](#), and taught ASL at [Crowley High School](#), Crowley, Texas (1981-2011). She earned her Master's degree in deaf education in [1985](#).

Their [daughter, Bonnie](#) (b. [1978](#)), married [Robert Lampasona](#) ([1999](#)). They have one daughter, [Madilyne](#), who is ten. Their [son, William Christian \("Chris"\)](#) (b. [1981](#)), married [Meredith Jones](#) ([2005](#)). They have two sons, William Jackson ("[Jack](#)," 4) and [Luke](#) (2).

Yount received the [Doctor of Education \(Ed.D.\) degree](#) in Foundations of Education from Southwestern Seminary ([1978](#)), and the [Doctor of Philosophy \(Ph.D.\) degree](#) in Educational Research from University of North Texas ([1985](#)). The Ed.D. was upgraded by SACS to a Ph.D. ([1996](#)) based on the experimental nature of his dissertation.

Church experience includes eleven years in [ministry among the deaf](#), five years as [full time minister of education](#) at Columbia Baptist church, Falls Church, Virginia, and sixteen years as [interim minister of education](#) in five churches. His present ministry outside teaching for [NOBTS](#), [Midwestern Baptist Theological Seminary](#), and [B. H. Carroll Theological Institute](#) focuses on teaching an Empty Nesters' Sunday School class at Wedgwood Baptist Church in Fort Worth, and traveling overseas to teach.

Yount has written four books besides this present volume: [Be Opened! Introduction to Ministry with the Deaf](#) (Broadman, [1976](#)), [The Disciplers Handbook](#) (Self-published, [1979-2006](#)), [Created to Learn](#) (B&H, [1996, 2010](#)), [Called to Teach](#) (B&H, [1999](#)), [Called to Reach](#) with [Mike Barnett of Columbia International Seminary](#) (B&H, [2007](#)), and the [Teaching Ministry of the Church](#), 2nd (B&H, [2008](#)).

Hobbies include writing, Russian, computers, racquetball, and chess. [But what he really enjoys is seeing the ah-HA s on the faces of students who see how Research and Stats fits together . . . day by day.](#)

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