

The University of Texas at El Paso - COBA
IBUS 6320: Behavioral Research in Accounting
Spring 2021
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Course Objectives

The era of “big data” is upon on us and unlike prior decades, data is so easy to acquire that the sheer volume of data availability is sometimes daunting. In simple terms, Big Data – when combined with Artificial Intelligence (AI) and related technologies – allow researchers to measure and assess significantly more information about the subtleties of organizations, and to use the information in making enhanced decision choices. AI can be described as the procedure and amplification of computer and machine systems able to undertake assignments typically driven by algorithms assist in meaningful work.

Researchers have access to the data that can explain or develop organizations’ strategic advantage or to remain competitive in today’s fast-paced business environment. Data analytics has become a must-have skill for researchers involved with behavioral and financial data.

Further, the evolution of AI technology allows individuals/organizations to explore their personalized needs, gather information, and develop good judgment to make decision choices within an algorithmic approach. Moreover, digital, and intelligent algorithms have identified the critical role of decision behavior on how we understand the process of making decision choices for both buyer and seller. An algorithm can be utilized to solve a problem or assist in making a decision that produces the best possible answer in the increasingly in-depth integration of the Internet and social life.

Organizations create and collect massive amounts of data as result of their day-to-day operations. Big data presents both opportunities and challenges for researchers. This course will incorporate a theory described as the Throughput Model (Rodgers, 1997, 2006) that utilizes an AI algorithmic pathway approach. This theory captures most of the major cognitive and social psychological theories in the past 70 years. Moreover, this theory can help explain the use of behavioral data along with financial and non-financial information. In addition, this theory provides six dominant algorithms that explain how distinct algorithmic pathways can lead to different decision choices. Further, as business professionals we are expected to know how to use this vast source of data to make better business decisions and identify potential risks. Understanding how to use data to formulate and solve business problems provides an opportunity for researchers and practitioners to become a forward-thinking strategic partner in the organization. The challenge for researchers and practitioners is to develop the skill set needed to extract value from big data through advanced analytics and AI apparatuses.

At the end of this seminar, you should have a better ability to answer the following questions:

- What exactly is a research question, expressed both conceptually and operationally?
- What does “validity” mean in research, and how is it established?

- What is the difference between a main effect and an interaction?
- What is the difference between a process model and an input-output model?
- What makes accounting research important and innovative?
- What are some key issues of research ethics?
- What accounting issues are currently being addressed using experimental research methods?
- What theories from psychology, sociology, economics, and other disciplines have accounting experimentalists drawn on to address these issues?
- When is experimentation an appropriate way to address an accounting research question?
- What have been the most important contributions from experimentation over the past five years to the theory and practice of accounting?
- What are Data Analytics & how is it important to researchers?
- What are the greatest needs and opportunities for future experimental research in accounting/finance?

Student Responsibilities

Component	Percentage of Total Evaluation
Article presentations and outlines	20%
Seminar participation	10%
Article summary sheets	0%
Review exercise (see article presentations and outlines)	0%
Preliminary research proposal	20%
Final examination (project)	50%
Total	100%

An “A” in the seminar generally implies excellent performance in all of these dimensions. Put differently, an “A” implies performance above expectation.

A “B” in the seminar generally implies some room for improvement in one or more of the dimensions, but a

clearly acceptable performance overall. Put differently, a “B” implies performance at expectation.

A “C” (or worse) in the seminar implies disappointment and the clear need for improvement to succeed in the doctoral program. Put differently, a “C” implies performance below expectation. I hope I do not need to use this category.

Grading philosophy: There is no cause for shame from receiving a “B” in a doctoral seminar. If I wanted to signal disappointment, I would award a “C.”

More importantly, at this point in your education you should be more concerned with what you learn than with what grades you get. When you graduate, few will notice your grade-point average as a doctoral student. They will, however, use interviews and other information to gauge your potential as a teacher and researcher.

Details on Each Component

1. Article presentations and outlines (20%)

Starting February 16th, each session will generally involve two or three research articles from the recent experimental literature in accounting. For each such article, I will assign one student to present the article as an advocate and one student to present as the critic.

Advocate: The advocate does not merely summarize the article, as we should all have read it beforehand, although some recap of key points is a good idea. More importantly, the advocate should emphasize the study’s contribution and should explain why that contribution is important. As the role implies, the advocate should take the author’s position and state the best case possible for the study.

Critic: The critic should point out limitations and constructive criticisms of the study, including limitations to the study’s incremental contribution and any threats to the study’s validity. In developing these thoughts, it is important to keep in mind that constructive criticism is not just a matter of finding fault. Rather, a constructive critic should consider potential ways to address the concerns raised.

Outlines: Both the advocate and critic should prepare an outline of approximately two or three pages for class distribution. Bring enough copies for each participant in the seminar, stapled and three-hole punched for easy insertion into a binder. This way, at the end of the semester, we will each have a collection of advocate and critic summaries for each article presented.

Advice: Embrace your role, as if you were assigned these roles in a court of law. This approach only works when we see spirited views on both “sides.” Have fun and make your presentations interesting. If successful, the advocate and critic in combination should lead us to a balanced discussion of the strengths and shortcomings of each assigned article.

2. Seminar participation (10%)

A seminar can only succeed with the active participation of its members. I expect all students to actively engage the discussion of each article, whether or not you are assigned to present that article as the advocate or critic. Ask questions of and challenge the advocate and critic, making them defend their positions.

3. Article summary sheets (Article presentations and outlines)

You should prepare a one-page “Article Summary Sheet” to help you organize your thoughts for each article. You are responsible for preparing this sheet for each article whether or not you are presenting the article as the advocate or critic. The Article Summary Sheet consists of two parts. First, it asks you to specify the study’s conceptual and operational research questions in so-called “Libby Boxes.” Second, it elicits one important point

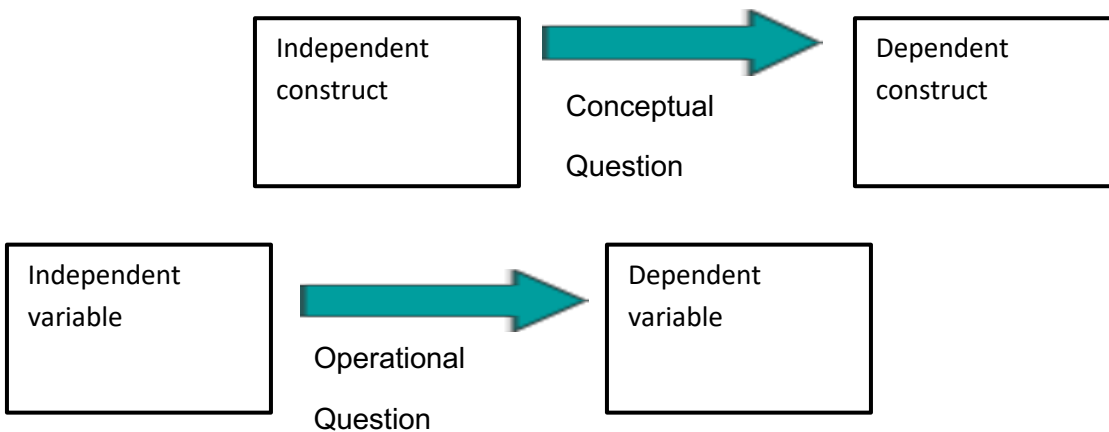
or question that you would like to discuss.

Article Summary Sheet

Your name _____ Article reference in the format Author (year)

Please fill out the boxes in the following diagram (informally known as “Libby boxes”) to indicate what you perceive are the study’s primary conceptual and operational research questions.

How does X influence Y?



Moderating variable(s), if any _____

Mediating variable(s), if any _____

Please indicate one question or comment from this research that you would like to discuss:

4. Preliminary Proposal, Due March 2nd (20%)

This is a preliminary proposal exercise designed to give you some practice with the review process. Please see the Kachelmeier (2004) article referenced below for some guidance on doing a constructive review. We will also discuss this assignment in class.

Find an accounting/finance research area you would like to address for your final project. Use keywords to find a paper that looks like it would be of interest to you (e.g., find an accounting research working paper using the

search engine at www.ssrn.com). Your preliminary proposal should include an introduction, literature review and methods you plan to use in the final project paper.

5. Research proposal, Due May 4th (50%)

In addition to the objective of familiarizing you with the recent literature, there is also a forward-looking objective to this seminar, encouraging you to contemplate research needs and opportunities for the future. To achieve this objective, each student will submit a research proposal. In approximately 15 double-spaced pages, your proposal should contain the following.

- Statement and motivation of the research question
 - Theory
 - Hypotheses
 - Experimental design
 - Plan of analysis
- The key to a successful proposal is precision. Help the reader to see clearly what research question you are addressing, why that question is important to accounting, what hypotheses you predict and why, and how exactly you propose to carry out the experiment. Essentially, the requirement is to write the front end of a manuscript on an accounting experiment (i.e., up to but not including the results). I am available for consultation as needed!
- Our last day of class, will be dedicated to proposal presentations of 25 minutes each. This is great practice for presenting at conferences.
6. Final examination (20%)
- A final examination will reinforce the major points emphasized in this seminar. I will offer some guidance for preparation as the date approaches.

Blackboard

The course will be setup on Blackboard Learning System so please ensure that you have access to it. Please check the site on a daily basis as the instructor will use it to communicate any updates, changes and reminders to students between classes.

Learning Environment

This course is designed to provide you with a learning experience similar to the approach you will use when you begin work as an accountant. This experience involves advance reading to understand important concepts followed by interactive discussion about how to apply those concepts in auditing situations. In light of this, student participation in class discussions is a very important element of this course.

Students with a Disability

If you feel you may have a disability that requires accommodations, contact the The Center for Accommodations and Support Services (CASS) Office at 747-5148, or go to the Union Bldg., East, Room 106, or email cass@utep.edu.

Statements on Faculty and Student Responsibilities

Statements on faculty and student responsibilities may be found on the College of Business website at: <http://business.utep.edu/About/responsibilities.aspx>.

Cell Phones

- Set your phone to mute or silent mode before coming to class.
- Do not answer incoming calls or make outgoing calls while in class.
- Do not use text messaging or web browser features while in class.

Other

This syllabus is subject to change. Any changes will be announced in class and posted to the Blackboard web site.

Class Schedule

Date	Topic and cases
1. 01/19	Introduction to Behavioral Research in Accounting Topic: Research fundamentals Process Thinking: Chapters 1-3
2. 01/26	Process Thinking: Chapters 1-3 Rodgers' Decision-Making Model Topic: Artificial Intelligence and Big Data
3. 02/02	Process Thinking: Chapters 4-5 Topic: Artificial Intelligence and Big Data Fostering innovation and diversity in accounting research
4. 02/09	Process Thinking: Chapters 6-8 Topic: Artificial Intelligence and Big Data
5. 02/16	Process Thinking: Chapters 9-11 Research ethics
6. 02/23	Topic: Causal Modeling, Surveys and Questionnaires & Cognitive Characteristics Topic: Creativity and unconventional thinking Research ethics
6. 03/02	Preliminary Project Assignment due
7. 03/09	Topic: Reciprocity and morale

8. 03/16	SPRING BREAK
03/23	Topic: Social responsibility
9. 03/30	Topic: Financial accounting effects on manager judgments and decisions
10. 04/06	Topic: Aggressive reporting
11. 04/13	Topic: Social dimensions of auditing Topic: Auditor exposure
12. 04/20	Topic: Auditing complex areas
13. 04/27	Topic: Motivating employees
14. 05/04	Final Exam Project

Course Schedule

Topic: Research fundamentals

Objective: Gain a basic understanding of the following:

- Modeling a research question
- Interactions and dummy vs. effects coding
- Mediation
- Validity categories
- Process Models
- Overview of accounting journals
- Basics of experimental design and analysis
- Styles of accounting experimentation

Readings:

- Demski, J. S., and J. L. Zimmerman. 2000. On ‘research vs. teaching’: A long-term perspective. *Accounting Horizons* 14 (3): 343-352.
- “Rodgers, W. *Process Thinking: Six pathways to successful decision making.* NY: iUniverse, Inc., 2006. ISBN-13:978-0-595-38950-6
- Seidman, B. 2015. Some common heartburn drugs may increase heart attack risk. June 11, 2015 website posting. Obtained at <http://www.cbsnews.com/news/common-heartburn-drugs-may-increase-heart->

[attack-risk/](#). [SEP]

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Topic: Artificial Intelligence and Big Data

Camerer, C.F. 2017. *Artificial intelligence and behavioral economics*. The National Bureau of Economic Research (NBER). Editors A. Agarwal, J. Gans, A. Goldfarb.

Cui, G., Wong, M.L., and Lui, H-K. 2006. Machine Learning for Direct Marketing Response Models: Bayesian Networks with Evolutionary Programming. *Management Science* 52(4), 597-612.

ICAEW. 2018. *Artificial intelligence and the future of accountancy*. <https://www.icaew.com/-/media/corporate/files/technical/information-technology/technology/artificial-intelligence-report.ashx?la=en>

Rodgers, W., Attah-Boakye, R. and Adams, K. (2020). The application of algorithmic cognitive decision trust modelling for cybersecurity within organisations, *IEEE Transactions on Engineering Management*, 161, 9 p., 120290.

West, P.M., P.L. Brockett, L.L. Golden. 1997. A comparative analysis of neural networks and statistical methods for predicting consumer choice. *Marketing Science* 16(4) 370–391.

Topic: Fostering innovation and diversity in accounting research

Basu, S. 2012. How can accounting researchers become more innovative? *Accounting Horizons* 26 (December): 851-870.

Chapman, C. S. 2012. Framing the issue of research quality in a context of research diversity. *Accounting Horizons* 26 (December): 821-831.

Hermanson, D. R. 2015. Model 2 – A personal journey in pursuit of creativity and impact. *Critical Perspectives on Accounting* 26 (February): 130-140.

Madsen, P. E. 2015. Has the quality of accounting education declined? *The Accounting Review* 90 (May): 1115-1147.

Rodgers, W. 2007. Problems and resolutions to future knowledge-based assets reporting,” *Journal of Intellectual Capital* 8, 205-215.

Topic: Research ethics

Bailey, C.D. 2015. Psychopathy, academic accountants' attitudes towards unethical research practices, and publication success. *The Accounting Review* 90 (July): 1307-1332.

Hunton, J. E., and A. Gold. 2010. A field experiment comparing the outcomes of three fraud brainstorming

procedures: Nominal group, round robin, and open discussion (retracted). *The Accounting Review* 85 (May): 911-935. Also see Retraction. 2013. *The Accounting Review* 88 (January): 357.

Malone, J. A. 2014. Report of Judith A. Malone, Bentley University Ethics Officer, Concerning Dr. James E. Hunton, with January 20, 2015 addendum. Obtained at <http://aaahq.org/Portals/0/documents/BentleyReportrepublishpermission6.pdf>.

American Accounting Association. 2015. Retraction of Articles Related to James E. Hunton. Obtained at <http://aaahq.org/Portals/0/documents/Website-FinalListofRetractedArticles-6-25-15.pdf>.

American Accounting Association. 2015. Policies on Publication Ethics: (1) Authorship, (2) Plagiarism, and (3) Data Integrity. Obtained at <http://aaahq.org/About/Governance/Policies-Procedures>.

Rodgers, W. and Gago, S. 2001. Cultural and ethical effects on managerial decisions: Examined in a Throughput Model. *Journal of Business Ethics*, 355-367.

Rodgers, W., Söderbom, A. and Guiral, A. 2014. Corporate Social Responsibility Enhanced Control Systems reducing the Likelihood of Fraud. *Journal of Business Ethics*, 91(Supplement 1), 151–166.

Salterio, S. E. 2014. We don't replicate accounting research – or do we? *Contemporary Accounting Research* 31 (Winter): 1134-1142.

Topic: Motivating employees and customers

Presslee, A., T. W. Vance, and R. A. Webb. 2013. The effects of reward type on employee goal setting, goal commitment, and performance. *The Accounting Review* 88 (September): 1805-1831.

Hales, J., L. W. Wang, and M. G. Williamson. 2015. Selection benefits of stock-based compensation for the rank-and-file. *The Accounting Review* 90 (July): 1497-1516.

Rodgers, W., Yeung, F., Odindo, C., and Degbey, W. (2021). Artificial Intelligence-Driven Music Biometrics Influencing Customers' Retail Buying Behavior, *Journal of Business Research*, (forthcoming).

Topic: Causal Modeling, Surveys and Questionnaires & Cognitive Characteristics

Rodgers, W. 1991. Evaluating accounting information using causal models: Classification of methods and implications for accounting research, *Journal of Accounting Literature*, 10, 151-180.

Rodgers, W. and Guiral, A. 2011. Potential Model Misspecification Bias: Formative Indicators Enhancing Theory for Accounting Researchers, *International Journal of Accounting*, 46, 2011, 25-50.

Mathers, N., Fox, N., and Hunn, A. 2009. Surveys and Questionnaires. National Institute for Health Research.

Ho, J. and Rodgers, W. 1993. A Review of Accounting Research on Cognitive Characteristics, *Journal of Accounting Literature*, 10, 101-130.

Topic: Creativity and unconventional thinking

Webb, R. A., M. G. Williamson, and Y. Zhang. 2013. Productivity-target difficulty, target-based pay, and outside-the-box thinking. *The Accounting Review* 88 (July): 1433-1457.

Rodgers, W., Al Shammakhi, B., Johansson, J., Wincent, J., and Adams, K. 2020. DIY Entrepreneurship: a decision-pathway framework for ethical thought structures, *Technological Forecasting & Social Change* (forthcoming).

Topic: Reciprocity and morale

Brown, J. L., P. R. Martin, D. V. Moser, and R. A. Weber. 2015. The consequences of hiring lower-wage workers in an incomplete-contract environment. *The Accounting Review* 90 (May): 941-966.

Christ, M. H., K. L. Sedatole, and K. L. Towry. 2012. Sticks and carrots: The effect of contract frame on effort in incomplete contracts. *The Accounting Review* 87 (November): 1913-1938.

Rodgers, W. and Gago, S. 2003. A model capturing ethics and executive compensation. *Journal of Business Ethics*, 48, 2003, 189-202.

Topic: Social responsibility

Ariely, D., A. Bracha, and S. Meier. 2009. Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *The American Economic Review* 99 (March): 544-555.

Balakrishnan, R., G. B. Sprinkle, and M. G. Williamson. 2011. Contracting benefits of corporate giving: An experimental investigation. *The Accounting Review* 86 (November): 1887-1907.

Elliott, W. B., K. E. Jackson, M. E. Peecher, and B. J. White. 2014. The unintended effect of corporate social responsibility performance on investors' estimates of fundamental value. *The Accounting Review* 89 (January): 275-302.

Rodgers, W., Choy, H., and Guiral, A. 2013. Do Investors Value a Firm's Commitment to Social Activities? *Journal of Business Ethics*, 114 (4), 607-623.

Topic: Financial accounting effects on investor judgments and decisions

Rodgers, W., Alhendi, E., and Xie, F. 2019. The Impact of Foreignness on the Compliance with Cybersecurity Controls, *Journal of World Business*, 54.

Tan, H-T., E. Y. Wang, and B. Zhou. 2014. When the use of positive language backfires: The joint effect of tone, readability, and investor sophistication on earnings judgments. *Journal of Accounting Research* 52 (March): 273-302.

Bonner, S. E., S. M. Clor-Proell, and L. Koonce. 2014. Mental accounting and disaggregation based on the sign and relative magnitude of income statement items. *The Accounting Review* 89 (November): 2087-2114.

Topic: Financial accounting effects on manager judgments and decisions

Libby, R., and K. Rennekamp. 2012. Self-serving attribution bias, overconfidence, and the issuance of management forecasts. *Journal of Accounting Research* 50 (March): 197-231.

Jackson, S. B., T. M. Keune, and L. Salzsieder. 2013. Debt, equity, and capital investment. *Journal of*

Accounting and Economics 56 (November-December): 291-310.

Rodgers, W. and Foss, K. 2011. Enhancing Information Usefulness by Line Managers' Involvement in Cross-Unit Activities. *Organization Studies*, 32, 683-703.

Topic: Aggressive reporting

Brown, T. J. 2014. Advantageous comparison and rationalization of earnings management. *Journal of Accounting Research* 52 (September): 849-876.

Maas, V. S., and M. van Rinsum. 2013. How control system design influences performance misreporting. *Journal of Accounting Research* 51 (December): 1159-1186.

Guiral, A., Rodgers, W., Ruiz-Barbadillo, E., and Gonzalo, J.A. 2010. Ethical Dilemmas in Auditing: Dishonesty or Unintentional Bias? *Journal of Business Ethics*, 91, (Supplement 1), 151-166.

Topic: Social dimensions of auditing

Kachelmeier, S. J., T. M. Majors, and M. G. Williamson. 2014. Does intent modify risk-based auditing? *The Accounting Review* 89 (November): 2181-2201.

Bauer, T. D. 2015. The effects of client identity strength and professional identity salience on auditor judgments. *The Accounting Review* 90 (January): 95-114.

Bennett, G. B., and R. C. Hatfield. 2013. The effect of the social mismatch between staff auditors and client management on the collection of audit evidence. *The Accounting Review* 88 (January): 31-50.

Guiral, A., Rodgers, W., Ruiz-Barbadillo, E. and Gonzalo, J.A. 2015. Can Expertise Mitigate Auditors' Unintentional Biases? *Journal of International Accounting, Auditing and Taxation* 24,105-117.

Topic: Auditing complex areas

Griffin, J. B. 2014. The effects of uncertainty and disclosure on auditors' fair value materiality decisions. *Journal of Accounting Research* 52 (December): 1165-1193.

Griffith, E. E., J. S. Hammersley, K. Kadous, and D. Young. 2015. Auditor mindsets and audits of complex estimates. *Journal of Accounting Research* 53 (March): 49-77.

Rodgers, W. and Al Fayi, S. 2019. Ethical Pathways of Internal Audit Reporting Lines, *Accounting Forum*, 43(2), 220-245.

Rodgers, W. and Housel, T. 2004. The effects of environmental risk information on auditors' decisions about prospective financial statements. *European Accounting Review*, 13, 523-540.

Topic: Auditor exposure

Rodgers, W., Guiral A. and Gonzalo, J.A. 2009. Different pathways that suggest whether auditors' going

concern opinions are ethically based, *Journal of Business Ethics*, 86, 347–361.

Kadous, K., and M. Mercer. 2012. Can reporting norms create a safe harbor? Jury verdicts against auditors under precise and imprecise accounting standards. *The Accounting Review* 87 (March): 565-587.