Sustainable Management Studies 603

METHODS

Winter, 2019

RCH 212 Thursdays, 11:30am - 2:20pm

Instructor: Dr. Laszlo Sarkany

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Office Location: EV3 - 4301

Office Hours: Tuesdays, 9am – 11am, or by appointment

Formal course description:

"This course will introduce quantitative and qualitative research methods such as statistical methods, case study analysis, life cycle assessment, survey methods, impact measurement, etc. Students will learn skills like risk assessment methods, sustainability measurement and reporting, qualitative and quantitative data analysis, literature review, ethical aspects of research and proposal writing."

COURSE DESCRIPTION:

The aim of this course is to introduce students to the appreciation of the metatheoretical, conceptual, analytical and methodological tools to undertake independent research dealing with sustainable management. The five-module course is focuses on such key topics as the philosophy of science and social science, situating the research question(s) within broader the literature on the topic, research design, and qualitative and quantitative methodologies and techniques. While enrolled in this course, students will gain an appreciation for the conceptual, analytical and practical skills necessary to pose astute research questions, conduct focused literature reviews, identify gaps in the relevant literature, decide on a study design, and operationalize their research questions.

As students traverse the contours of the ontological and methodological aspects of the relevant scientific principles, students will be encouraged to continually think of ways the theoretical and metatheoretical aspects of science and social science inform their own research projects. Familiarity with the conceptual aspects of research will enable students to employ a healthy sense of (self) criticism in relation to their own work, and will enable them to constructively evaluate and critique other relevant research as well.

The order in which the modules are addressed in the course outline provides a potential path by which one is able to conceptualize, operationalize and report or write a research proposal or articles for publication. Students are strongly encouraged to pay a close attention to both, the individual modules and the way in which the five modules create a full research process.

LEARNING OBJECTIVES

By completing this course, will be able to have an appreciate of the research process, be able to differentiate between different perspectives on research, design and complete research projects that are coherent and organized, and be able to critically evaluate their own research and the research of other scholars.

TABLE OF MODULES

MODULE 1 – Philosophy of Science and Social Science	
January 8 th and 10 th	Introductions
January 15 th and 17 th	Epistemology, Ontology, and the Scientific Method
MODULE 2 – Literature Review	
January 22 nd and 24 th	Literature Review and Critique
January 29th and 31st	The Role of Theory
MODULE 3 – Research Design	
February 5 th and 7 th	Research Questions and Hypotheses
February 12 th and 14 th	Designing Research
MODULE 4 – Methodologies	
February 19 th and 21 st	READING WEEK
February 26 th and 28 th	Qualitative Research
March 5 th and 7 th	Quantitative Research
March 12 th and 14 th	Mixed Method Approaches
MODULE 5 – Research Techniques	
March 19 th and 21 st	Qualitative Techniques
March 26th and 28th	Quantitative Techniques
April 4 th	In-class test

OFFICE HOURS

Please note that above and beyond my regularly scheduled office hours, I will be more than happy to meet anyone by appointment. I will be on campus on Tuesdays and Fridays, and so meeting after class is always a possibility. In addition, I am available via email as well as Skype. Please allow a maximum of 48-hour turnaround for email or Skype calls.

TEXTS

Theory:

Chalmers, A. F. 1999. What is this thing called science? (4th ed.) Indianapolis, IN: Hackett Publishing Company.

ISBN-10: 162466038X; ISBN-13: 978-1624660382 - ONLINE

Research Design:

Creswell, J. W. 2014. Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage Publications.

ISBN-10: 1452226105; ISBN-13: 978-1452226101 – RESERVES - H62 .C6963 2018 (St. Jerome's Reserves); H62 .C6963 2014 (Porter – Stacks)

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research*. Princeton: New Jersey, Princeton University Press. ISBN: 9780691034713

Research Praxis:

Alvesson, M., & Sandberg, J. 2013. *Constructing research questions: Doing interesting research.* Thousand Oaks, CA: Sage Publications.

ISBN-10: 144625593X; ISBN-13: 978-1446255933 - ONLINE

Machi, L. A., & McEvoy, B. T. 2012. *The literature review: Six steps to success* (2nd ed.). Thousand Oaks, CA: Corwin Publications. ☐ **ISBN-10:** 1452240884; **ISBN-13:** 978-1452240886 – RESERVES - **LB1047.3** .**M33** 2012 (Porter - Stacks)

Texts are available for purchase in the University of Waterloo bookstore. You will be able to access additional readings through the Dana Porter Library and the Internet.

Course Requirements, Expectations, and Standards:

GRADING

I) Weekly Seminar Participation: 20%

II) Seminar Leadership: 20%

III) Seminar Rapporteur: 10%

IV) Reflection Journal Entries: 20%

V) In-Class Test: 30%

COURSE REQUIREMENTS:

WEEKLY SEMINAR PARTICIPATION

You will be expected to attend, and fully participate in, all class meetings. Active and focused participation during meetings will be inherently important not only for completing the course, but also for your personal intellectual development. Keys to success in regards to this course component hinges on the following:

- 1) For each meeting, you are expected to read all the assigned readings and skim at least some of the recommended texts. Please note that you will be evaluated on the quality of your participation and not on the frequency by which you participate.
- 2) Your communication during the discussions and presentation should be self-contained and focused on the topic(s) being discussed.
- 3) As the overall subject matter of the course lends itself to discussions involving a plurality of views and worldviews about research which is inherently personal, please note that you are expected to conduct yourself with utmost professionalism and respect at all times.

^{***} Please note that attendance will be taken during the weekly meetings, and it will count for half (or 50%) of the grade for this component.

DISCUSSION LEADERSHIP

In groups of maximum three, students will be expected to sign up to lead one of the seminar discussions during the first half of each meetings. In order the adequately prepare for leading the discussions, students are asked the following

- 1) Prepare a maximum **3-page (single-spaced)** synthesis and NOT summary of the assigned readings. The aim here is to outline how the overall themes in the readings are connected to the theme of the week, and the overall foci of the course. The three-page summaries should have the following three components:
 - a. A rationale in regards to the importance of the topic
 - b. The synthesis
 - c. Stating four to five key questions which will generate a rigorous class discussion
- 2) The three-page document needs to be posted on the LEARN site of the course by 3:00pm the day before the class on Wednesdays.
- 3) During the meeting, the leaders' first task will be to provide a brief summary of the circulated document, restate the questions, and <u>lead the class in discussions and activities which</u> <u>may include games, etc.</u> (A particularly useful on-line tool that you may want to consider using is 'Kahoot' as it encourages class participation via the web, in real-time, using smart phones, laptops, etc.)
- 4) This presentation should not be longer than 45 minutes.

DISCUSSION RAPPORTEURS

The seminar rapporteur(s) will provide a summary of the key topics, concepts and ideas discussed during a particular seminar and will post a maximum **two-page single-spaced document** of their summaries and observations by 11.59pm on the Friday following the seminar meeting. The rapporteur(s) will provide a brief, maximum five-minute discussion of the document at the beginning of the class following the one being reported on.

REFLECTION JOURNAL ENTRIES

Each student will be asked to submit a maximum of three (3) entries by April 4th. The best two (2) will be used to assign a grade for this course component. Each entry must be at least 1000-words long, and it must include a reflection on how the weekly readings, seminar discussions, and what the guest speakers and presenters spoke about inform the particular research question, design, or research method considered by each student. In order to complete the assignment, students are encouraged to consider the following questions:

- 1) Which reading(s) did I find most interesting and why?
- 2) Which reading(s) did I find the least interesting and why?
- 3) What ideas, concepts and arguments did I find the most compelling, and why?
- 4) How may I integrate what I read, learned and heard into my own research project?

IN-CLASS TEST

The test will be held on Thursday, April 4th and will last approximately 2 hours. The purpose of this evaluation tool is to tests students' general understanding of the most important and practical concepts, ideas, methodologies and methods considered during the course. The test will be comprised of the following types of questions:

- Defining terms
- Short answers
- Short and long essay questions

WEEKLY READINGS

MODULE 1: PHILOSOPHY OF SCIENCE AND SOCIAL SCIENCE

Week 1 – Introduction to the course – An Overview

Introductions
A close reading of the syllabus
Code of conduct and expectations

Class discussion: what are research and theory, how do they relate, and why are they important?

Week 2 – Epistemology, Ontology and the Scientific Method

Discussion Leadership – Dina, Tahsan and Sebastian Rapporteur - Snehaa and Karim

Required:

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 1.

A.F. Chalmers 1999, *What is This Thing Called Science*? (4th ed.), Indianapolis, IN: Hackett Publishing Company. Chapters 1, 5, 6 & 7.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In *Handbook of qualitative research*, 2, 105-117.

Kerlinger, F. N. (1973). Science and the scientific approach. Foundations of behavioral research: Educational, psychological and sociological inquiry: 2-15.

Recommended readings:

Kuhn, T. S. 1970. *The structure of scientific revolutions*. Chicago, II: University of Chicago press.

Popper, K. 1963. Science as Falsification, in *Conjectures and Refutations* (New York: Basic Books, 1962). Available online at: http://faculty.washington.edu/lynnhank/Popper-1.pdf.

Wade, N. 1977. Thomas S. Kuhn: Revolutionary Theorist of Science. *Science* 197(4299), 143-145.

Zaltman, G., LeMasters, K., & Heffring, M. 1982. Four: Thinker toys: Concepts, propositions, and theories, and Five: Deductive and inductive thinking, in *Theory construction in marketing:* Some thoughts on thinking. New York: Wiley, (71-112).

MODULE 2: LITERATURE REVIEW

Week 3 – Constructing, Reviewing and Critiquing the Literature

Discussion Leadership: Darlene, Sam and Josie

Rapporteur: Pedro and Dina

Required readings:

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 2

Machi, L. A., & McEvoy, B. T. 2012. *The literature review: Six steps to success* (2nd ed.). Thousand Oaks, CA: Sage Publications. (Complete Book).

Recommended readings: (2 – 3 pages max; each!)

Johanson, L. M. 2007. Sitting in your reader's chair attending to your academic sensemakers. *Journal of Management Inquiry 16*(3), 290-294.

Kuyper, B. J. 1991. Bringing up scientists in the art of critiquing research. *BioScience* 41(4), 248-250.

Leblebici, H. 1996. Chapter 27: The act of reviewing and being a reviewer. In *Rhythms of academic life: Personal accounts of careers in academia* (269-274). Thousand Oaks: CA: Sage Publications.

MacInnis, D. 2003. Responsibilities of a good reviewer: Lessons learned from kindergarten. *Journal of the Academy of Marketing Science* 31(3), 344-345.

Schwab, D. P. 1985. Chapter 10: Reviewing empirically based manuscripts: Perspectives on process. In *Publishing in the organizational sciences* (171-181). Homewood, II: Richard D. Irwin, Inc.

Waser, N. M., Price, M. V., & Grosberg, R. K. 1992. Writing an effective manuscript review. *BioScience* 42(8), 621-623.

Webster, J., & Watson, R. T. 2002. Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly 26*(2), xiii-xxiii.

Week 4 – Theory

Discussion Leadership: Natalie, Aida, Kimiya

Rapporteur: Josie and Darlene

Required

Chalmers, A. F. 1999. What is This Thing Called Science? (4th ed.), Indianapolis, IN: Hackett Publishing Company. Chapters 8, 9.

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 3

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research*. Princeton: New Jersey, Princeton University Press. Chapter 1, section 2.

Sutton, R. I., & Staw, B. M. 1995. What theory is not. *Administrative Science Quarterly 40*(3), 371-384.

Whetten, D. A. 1989. What constitutes a theoretical contribution? *Academy of Management Review 14*(4), 490-495.

Recommended readings:

Bacharach, S. B. 1989. Organizational theories: Some criteria for evaluation. *Academy of Management Review 14*(4), 496-515.

DiMaggio, P. J. 1995. Comments on What theory is not. *Administrative Science Quarterly 40*(3), 391-397.

Klein, K. J., & Zedeck, S. 2004. Introduction to the Special Section on Theoretical Models and Conceptual Analyses: Theory in Applied Psychology: Lessons (Re) Learned. *Journal of Applied Psychology* 89(6), 931-33.

Weick, K. E. 1995. What theory is not, theorizing is. *Administrative Science Quarterly 40*(3), 385-390.

MODULE 3 – RESEARCH DESIGN

Week 5 – Research Questions and Hypotheses

Discussion Leadership: Daniel, Valentina and Pedro Rapporteur: Sam and Natalie

Required readings:

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications: Chapter 7

Alvesson, M., & Sandberg, J. 2013. *Constructing research questions: Doing interesting research.* Thousand Oaks, CA: Sage Publications. (Complete book).

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research*. Princeton: New Jersey, Princeton University Press. Chapter 4

Recommended readings:

McGuire, W. J. 1997. Creative hypothesis generating in psychology: Some useful heuristics. *Annual Review of Psychology 48*(1), 1-30.

Week 6 – Issues in Design

Discussion Leadership: Karim, Adrian Rapporteur: Aida and Sebastian

Required readings:

Bagozzi, R. P., Yi, Y., & Phillips, L. W. 1991. Assessing construct validity in organizational research. *Administrative Science Quarterly* 36(3), 421-458.

Berkowitz, L., & Donnerstein, E. 1982. External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American Psychologist 37*(3), 245-257.

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research*. Princeton: New Jersey, Princeton University Press. Chapter 5

Klein, K. J., & Kozlowski, S. W. 2000. From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods 3*(3), 211-236.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88, 879-903.

Recommended readings:

Adcock, R., Collier, D. 2001. Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review 95*(3), 529-546.

Chen, G., Mathieu, J. E., & Bliese, P. D. 2003. A framework for conducting multilevel construct validation. *Research in Multi Level Issues* 3, 273-303.

Edwards, J.R. 2001. Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods* 4(2), 144-192.

Gigerenzer, G. 1991. From tools to theories: A heuristic of discovery in cognitive psychology. *Psychological Review 98*(2), 254.

Hinkin, T. R. 1995. A review of scale development practices in the study of organizations. *Journal of Management* 21(5), 967-988.

Klein, K.J., Dansereau, F., Hall, R.J. 1994. Levels issues in theory development, data collection and analysis, *Academy of Management Review* 19(2), 195-229.

- Klein, K. J., & Kozlowski, S. W. 2000. *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*. Jossey-Bass.
- Klein, K. J., Tosi, H., & Cannella, A. A. 1999. Multilevel theory building: Benefits, barriers, and new developments. *Academy of Management Review 24*(2), 248-253.
- Mitchell, T. R. 1985. An evaluation of the validity of correlational research conducted in organizations. *Academy of Management Review 10*(2), 192-205.
- Murphy, K.R. 2009. Validity, validation and values. *The Academy of Management Annals* 3: 421-461.
- Podsakoff, P. M., MacKenzie, S. B., Podsakoff, N. P., & Lee, J. Y. 2003. The mismeasure of man (agement) and its implications for leadership research. *The Leadership Quarterly 14*(6), 615-656.
- Podsakoff, P. M., & Organ, D. W. 1986. Self-reports in organizational research: Problems and prospects. *Journal of Management* 12(4), 531-544.
- Rosenbaum, P. R. 1999. Choice as an alternative to control in observational studies. *Statistical Science* 14(3), 259-304.
- Rousseau, D. M. 1985. Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, 7(1), 1-37.
- Schmitt, N. 1994. Method bias: The importance of theory and measurement. Journal of Organizational Behavior 15(5), 393-398.
- Schriesheim, C. A., Hinkin, T. R., & Podsakoff, P. M. 1991. Can ipsative and single item measures produce erroneous results in field studies of French and Raven's (1959) five bases of power? An empirical investigation. *Journal of Applied Psychology* 76(1), 106.
- Schwab, D. P. 1980. Construct validity in organizational behavior. *Research in Organizational Behavior* 2, 3-43. Greenwich, VT: JAI Press Inc.
- Schwarz, N. 1999. Self-reports: How the questions shape the answers. *American Psychologist 54*(2), 93-105.
- St. John, C.H. 2005. Multi-theoretical mixed-level research in strategic management. *Research Methodology in Strategy and Management* 2: 197-223.
- Venkatraman, N., & Grant, J. H. 1986. Construct measurement in organizational strategy research: A critique and proposal. *Academy of Management Review* 11(1), 71-87.
- Weber, S. J., & Cook, T. D. 1972. Subject effects in laboratory research: An examination of subject roles, demand characteristics, and valid inference.

Psychological Bulletin 77(4), 273.

Wong, C. S., Law, K. S., & Huang, G. H. 2008. On the importance of conducting construct-level analysis for multidimensional constructs in theory development and testing. *Journal of Management* 34(4), 744-764.

MODULE 3 – METHODOLOGIES

Week 7 – Qualitative Approaches

Discussion Leadership: Sevile, Noor and Elham

Rapporteur: Kimiya and Betsy

Required readings:

Corley, K. & Bansal, P. (2011). The coming of age for qualitative research: Embracing the diversity of qualitative methods. *Academy of Management Journal*, *54*(2), 233-237.

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research.* Princeton: New Jersey, Princeton University Press. Chapter 3, except 3.1.1, and chapter 6

Recommended readings:

Chalmers, A. F. 1999. What is this thing called science? (4th ed.), University of Queensland Press. Chapter 4

Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review 14*(4), 532-550.

Evans, R. 2011. Case study method in sustainability research. In A. Franklin & P. Blyton (Eds.), *Researching sustainability. A guide to social science methods, practice and engagement* (pp. 54-70). New York, NY: Earthscan.

Gephart, R. P. 2004. Qualitative research and the Academy of Management Journal. *Academy of Management Journal 47*(4), 454-462.

Gummesson, E. 2007. Access to reality: observations on observational methods. *Qualitative Market Research: An International Journal* 10(2), 130-134.

Locke, K. 2011. Field research practice in management and organization studies: reclaiming its tradition of discovery. *The Academy of Management Annals* 5(1), 613-652.

Russell, B. H. 2000. Interviewing: unstructured and semi-structured. In *Social Research Methods: Qualitative and quantitative Approaches* (189-226). Thousand Oaks: Sage Publications.

Week 8 – Quantitative Approaches

Discussion Leadership: [Faculty]

Rapporteur: Valentina and Adrian; Taylor, Sohani and Parnia

Required reading:

Billiet, J., & Loosveldt, G. 1988. Improvement of the quality of responses to factual survey questions by interviewer training. *Public Opinion Quarterly* 52(2), 190-211.

Bush, A. J., & Hair Jr, J. F. 1985. An assessment of the mall intercept as a data collection method. *Journal of Marketing Research* 22(2), 158-167.

Fox, R. J., Crask, M. R., & Kim, J. 1988. Mail survey response rate a meta-analysis of selected techniques for inducing response. *Public Opinion Quarterly 52*(4), 467-491.

Griffin, R., & Michele Kacmar, K. 1991. Laboratory research in management: Misconceptions and missed opportunities. *Journal of Organizational Behavior* 12(4), 301-311.

King, Gary, Robert O. Keohane, & Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference and Qualitative Research*. Princeton: New Jersey, Princeton University Press. Chapter 3, except 3.1.2.

Recommended readings:

Chalmers, A. F. 1999. What is this thing called science? University of Queensland Press. Chapter 3.

Birnbaum, M. H. 1999. How to show that 9> 221: Collect judgments in a between-subjects design. *Psychological Methods 4*(3), 243.

Greenwald, A. G. 1976. Within-subjects designs: To use or not to use?. *Psychological Bulletin 83*(2), 314.

Latham, G. P., Erez, M., & Locke, E. A. 1988. Resolving scientific disputes by the joint design of crucial experiments by the antagonists: Application to the Erez–Latham dispute regarding participation in goal setting. *Journal of Applied Psychology* 73(4), 753.

Linsky, A. S. 1975. Stimulating responses to mailed questionnaires: A review. *Public Opinion Quarterly* 39(1), 82-101.

McEntee, J. C. &Burst, D. V. 2011. Surveying the field: Applying the just sustainability paradigm to survey research. In A. Franklin & P. Blyton (Eds.), Researching sustainability. A guide to social science methods, practice and

engagement (pp. 137-158). New York, NY: Earthscan.

Poe, G. S., Seeman, I., McLaughlin, J., Mehl, E., & Dietz, M. 1988. "Don't know" boxes in factual questions in a mail questionnaire effects on level and quality of response. *Public Opinion Quarterly* 52(2), 212-222.

Wheelan, Charles. 2013. *Naked Statistics: Stripping the Dread from the Data.* New York: W. W. Norton.

Week 9 – Mixed Methods:

Discussion Leadership: Snehaa, Betsy and Zhi

Rapporteur: Noor and Ahsan

Required readings:

Creswell, J. W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 10.

Greene, J. C., Caracelli, V. J., & Graham, W. F. 1989. Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis* 11(3), 255-274.

Morse, J. M. 1991. Approaches to qualitative-quantitative methodological triangulation. *Nursing research 40*(2), 120-123.

Yauch, C. A., & Steudel, H. J. 2003. Complementary use of qualitative and quantitative cultural assessment methods. *Organizational Research Methods* 6(4): 465-480.

Recommended readings:

Plano Clark, V. L., & Creswell, J. W. 2007. *The mixed methods reader.* Thousand Oaks, CA: Sage Publications.

Tashakkori, A., & Teddlie, C. (Eds.). 2003. *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage Publications.

MODULE 4 – DATA CODING, ANALYSIS AND INTERPRETATION

Week 10 – Qualitative Techniques

Discussion Leadership: [Taylor, Sohani, Parnia]

Rapporteur: Zhi and Daniel

Required readings:

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 9.

Gibbert, M., Ruigrok, W., & Wicki, B. 2008. What passes as a rigorous case study?. Strategic Management Journal 29(13), 1465-1474.

Merton, R. K. 1987. The focused interview and focus groups: Continuities and discontinuities. *The Public opinion quarterly 51*(4), 550-566.

Pratt, M. G. 2009. From the editors: For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal* 52(5), 856-862.

Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*, *50*(1), 20-24.

Spiggle, S. 1994. Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research* 21(3), 491-503.

Recommended readings:

Boice, R. 1983. Observational skills. Psychological Bulletin 93(1), 3.

Kolbe, R. H., & Burnett, M. S. 1991. Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of Consumer Research* 18(2), 243-250.

Langley, A., & Abdallah, C. 2011. Templates and turns in qualitative studies of strategy and management. *Research Methodology in Strategy and Management 6*, 201-235.

Phillips, N., Sewell, G., & Jaynes, S. 2008. Applying critical discourse analysis in strategic management research. *Organizational research methods* 11(4), 770-789.

Week 11 – Quantitative Techniques

Discussion Leadership: [Faculty]
Rapporteur: Sevile and Elham

Required readings:

Allchin, D. 2001. Error types. *Perspectives on Science* 9(1), 38-58.

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage Publications. Chapter 8.

Cashen, L. H., & Geiger, S. W. 2004. Statistical power and the testing of null hypotheses: A review of contemporary management research and recommendations for future studies. *Organizational Research Methods* 7(2), 151-167.

Nester, M. R. 1996. An applied statistician's creed. *Applied Statistics 45*(4), 401-10.

Prentice, D. A., & Miller, D. T. 1992. When small effects are impressive. *Psychological Bulletin*, *112*(1), 160-164.

Wainer, H. 1999. The most dangerous profession: A note on nonsampling error. *Psychological methods 4*(3), 250-256.