

University of North Carolina at Charlotte BDBA

BDBA-8200-Research Methods I – Fall 2018

Professors: Lead Instructor: Torsten Pieper

Meeting Time: 8:00 AM to 5:00 PM

Room: Center City

Office Hours: By appointment

Contact Information:

Dr. Chandrasekar Subramaniam csubrama@uncc.edu

Dr. Laura Madden maddenl@ecu.edu

Dr. Torsten Pieper tpieper@uncc.edu

Course Description

This course covers the development and application of advanced research skills. Both advanced quantitative and qualitative research methods will be discussed. Toward this aim, students extend knowledge gained from previous courses and explore how advanced analytical software enables them to assess the measurement characteristics of variables / constructs and test the theoretical relationships among them. This course also helps students develop broader skills of scientific inquiry through qualitative methods by providing a review of major qualitative research designs, qualitative data collection and analysis methods, including state-of-the-art software packages, as well as effective strategies for presenting qualitative research findings.

Course Objectives

Upon completion of the course, students will be able to:

- Understand differences between quantitative and qualitative research designs and analytical methods, evaluate strengths and weaknesses, and choose an appropriate design for a particular research question or type of study.
- Conduct and evaluate advanced statistical and qualitative analyses in business research.
- Demonstrate proficiency in conducting advanced statistical and qualitative data analyses.
- Apply and interpret computer software for advanced statistical analyses as well as for qualitative data analysis.
- Communicate results of statistical and qualitative analyses clearly and concisely.

Course Design

Session Format

Classes will meet once a month for 5 months. Classes run from 8:00 AM until 5:00 PM with breaks in-between. A different faculty member will lead each class day. Students are expected to participate actively during the sessions. To facilitate this, required readings will be assigned and must be read prior to each class meeting. Additional assignments may occur after a class meeting. Carefully read and be prepared to discuss all required readings prior to each class meeting.

Instructional Method

The course will be delivered in a seminar style setting that includes open discussion, lectures, in-class projects and presentations.

Individual Assignments

Please refer to the specific assignments outlined by the respective instructors.

Course Materials

Course materials will consist of a combination of journal articles, textbooks, and software packages for quantitative and qualitative data analysis. Required course materials will be provided by the respective instructor prior to class.

Textbooks

Hair, J. F., B. Black, B. Babin, & R. Anderson (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.

Software

The course will make use of various software packages for quantitative and qualitative data analysis. Quantitative software packages will involve SPSS, AMOS and SmartPLS (www.smartpls.de). Students will be provided with access to these software packages and are expected to ensure the software is properly installed and ready to be used prior to the respective class. Students are required to bring their own laptops to lectures for in-class application and exercises.

Grading

| Course Component | Weight |
|-------------------------------------|-------------|
| Class Participation and Discussions | 40% |
| Qualitative Course Assignment | 30% |
| Quantitative Course Assignment | 30% |
| Total | 100% |

Class Participation and Discussions

Students are expected to actively participate in class discussions. Class discussion are comprised of in-class discussions during lectures and may also include online discussion threads in Canvas. The class participation and discussion will include the assignment and open discussion of course readings as well as other assignments or current issues arising in the business sector.

Qualitative Assignment

Students design a research project that can be explored with qualitative methods. Part of the class on August 11 will be used to start developing this project. Students will present the findings of their research during an in-class poster session on October 13. Additional details will be provided by the instructor in class and posted on Canvas.

Quantitative Assignment

Students are provided with a dataset and theoretical model and asked to test the model using both covariance-based structural equation modeling (CB-SEM with AMOS) and variance-based structural equation modeling (PLS-SEM with SmartPLS), and involving all necessary analytical steps to obtain valid results. For each application (CB-SEM and PLS-SEM), students are asked to write up the procedures performed and results obtained as if they were going to submit a research article for publication in a peer-reviewed journal. In a third step, students will compare the results of the two approaches and discuss how they think the results of the two approaches

differ and why they differ.

The maximum page count for this assignment is **15** pages, including tables, charts, and references. APA formatting guidelines apply.

Due date for this assignment is **December 10, 2019**. Assignments are to be submitted electronically in MS Word format. No late assignments will be accepted.

Course Sequence

| Date | Session | Topic | Faculty |
|--------------------|-----------|--|-------------------------|
| Sunday, July 14 | Morning | During the morning session, we will discuss the principles of Binary Logistic Regression & Multinomial Logistic Regression methods. The discussion will be followed by hands-on problem solving in R-Studio. | Dr. Chandra Subramaniam |
| | | During the afternoon, we will discuss the articles which have applied logistic regression in different contexts. | |
| Sunday, Aug 11 | Morning | Overview of Qualitative Methods – This session will explore the constellation of analytical methods included under the heading of qualitative research. We will discuss the purposes and benefits of qualitative research and explore the differences between major types. | Dr. Laura Madden |
| | Afternoon | Exemplars – During this session, we will examine articles that employ the research designs discussed during the morning sessions. Students will be responsible for identifying and explaining the major methods used, as well as why the method in each article was appropriate for the research question. | |
| Sunday, Sep 15 | Morning | Analytic Techniques – This session will be a hands-on demonstration of how to analyze qualitative data using a variety of software packages. | Dr. Laura Madden |
| | Afternoon | Research Design – This session will focus on the necessary steps to conceptualize, design, and clarify a qualitative research project. Students will also practice interview techniques during the second half of the session. | |
| Sunday, Oct 13 | Morning | Presenting Qualitative Research – We will again turn to exemplar qualitative research papers to examine how to structure research papers and present findings. | Dr. Laura Madden |
| | Afternoon | Student Presentations – Poster sessions will be used for students to present the findings of their own research and gather additional data and notes from each other related to the research question designed during the second session on September 9 th . | |
| Sunday, Nov 10 | Morning | Covariance-based Structural Equations Modeling (CB-SEM) – Review and Applications in AMOS software | Dr. Torsten Pieper |

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| | | Partial Least Squares - Structural Equations Modeling (PLS-SEM) – Formative and Reflective Measurement Models | |
| | Afternoon | PLS-SEM – Interpretation and Reporting PLS-SEM – Application and Practice | |

Course Information & Guidelines

Classroom Policies:

1. **Attendance.** Attendance is mandatory. Missing a class is equivalent to missing 20% of the semester. Late arrival or early departure will count as an absence. An absence, unless due to medical conditions and approved by student services, will result in a **FAIL** of the class.
2. **Orderly and Productive Classroom Conduct.** We will conduct this class in an atmosphere of mutual respect. We encourage your active participation in class discussions as well as online. Each faculty may have strongly differing opinions on the various topics of class discussions. The orderly questioning of the ideas of others, including the faculty, is welcome. However, we will exercise our responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion.
3. **Classroom Expectations.** This syllabus contains the policies and expectations the faculty have established for this course. Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Students who fail to abide by these policies and expectations, risk losing the opportunity to participate further in the course. The standards and requirements set forth in this syllabus may be modified at any time by the instructors. Notice of such changes will be by announcement in class and/or by changes to this syllabus posted on the course Canvas website.
4. **Materials.** All materials submitted as part of course requirements become the property of the instructor. Students desiring to retain copies of their work should make such copies before turning in their materials.
5. **Electronic Devices in Classroom.** Use of computing, communication, or other devices during the class time **for purposes other than those required for the class** is prohibited and may result in being asked to leave the classroom for the remainder of the class period. This includes the use of laptops, lab computers, phones or other devices for Internet browsing, game playing, reading news, emailing, texting, chatting, IM, Facebook, or other activities not required for the class. **Cellular phones and other communication devices must be silenced AND stored away during class.**
6. **Under no circumstances** will students be permitted to spend their class time working on assignments for other classes, checking e-mail, surfing the Web, texting, or engaging in activities not related to the class. Attempts to engage in such behavior will be reflected in lower grades and may lead to removal from the course.
7. **Grade Appeals.** If a student believes that the grade that they received on an assignment or an exam was in error or unfair, the student can appeal to the professor in writing within seven (7) calendar days after the grades are posted. The appeal should clearly state the reasons why the grade is believed to be unfair or the nature of the error. Overdue appeals will not be considered.
8. **Use of Tobacco and e-Vapor Products in Class.** The use of tobacco and e-Vapor products in class is prohibited. If a student uses any form of tobacco or e-Vapor product during class, the student may be asked to leave the class.

University Policies:

9. **Academic Integrity**

- As a program that helps to create business and government leaders, the College of Business has an obligation to ensure academic integrity is of the highest standards. Standards of academic integrity will be enforced in this course.
 - University regulations will be strictly enforced in all cases of **academic irregularities, cheating or plagiarism** or any variations thereof. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work.
 - All UNCC students have the responsibility to be familiar with and to observe the requirements of **The UNCC Code of Student Academic Integrity** (see the Catalog and also <http://integrity.uncc.edu>). This code forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism of written materials and software projects, abuse of academic materials (such as Library books on reserve), and **complicity in academic dishonesty** (helping others to violate the code).
 - Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at: <http://www.legal.uncc.edu/policies/ps-105.html> (also see <http://integrity.uncc.edu/>). All UNC Charlotte students are expected to be familiar with the Code and to conduct themselves in accord with these requirements. To clarify, any academic dishonesty can result in a grade of "Fail" (F) for the course. Academic dishonesty also pertains to violating the "rules" of this syllabus. Anyone violating this policy will receive an "F" for the course.
 - For this course, it is permissible to assist classmates in general discussions of computing techniques. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned homework and laboratory exercises. So while students are encouraged to work together on class exercises, each student must produce and submit an own individual graded assignment in the end (unless it is a group assignment). A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own. If you need help on an assignment, contact your instructor.
 - Any further specific requirements or permission regarding academic integrity in this course will be stated by the instructor, and are also binding on the students in this course.
 - Students are expected to **report cases of academic dishonesty** they become aware of to the course instructor who is responsible for dealing with them.
10. **Use of Computing Resources Policy.** For the purposes of the course you will be given access to a variety of computing resources. These resources are to be used only for the purposes of this course. Intentional or grossly negligent disruptive and/or illegal use of the resources will result at a minimum in a loss of access privileges and a failing grade for the course. Further action will be taken as necessary. All University Policies on the use of Computing Resources apply.
 11. **Disability Accommodations.** UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.
 12. **Diversity.** The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

13. **Incomplete Grades.** Students will not be given an incomplete grade in the course without sound reason and documented evidence as described in the Student Handbook. In any case, for a student to receive an incomplete, he or she must be passing the course and must have completed a significant portion of the course.
14. **Course Changes.** The instructor reserves the right to make any necessary changes to the course content, schedule, and policies. Changes will be announced in class and will also be posted online and communicated via email.
15. **Religious Accommodations.** The instructor will observe University Policy 409 (<https://legal.uncc.edu/policies/up-409>) on matters of religious accommodation. Please note that the procedure prescribed by this policy requires a notice to the instructor prior to the census date of the semester (typically the tenth day of instruction).
16. **Severe Weather.** In case classes are cancelled due to severe weather, the DBA program has designated make-up days for each semester.

Detailed Course Flow

Sunday, July 14, 2019

Topic: Binary and Multinomial Logistic Regression

Instructor: Dr. Chandrasekar Subramaniam

Please refer to the materials and assignments provided in Canvas.

Sunday, August 11, 2019

Instructor: Dr. Laura Madden

Theoretical Underpinnings

Overview of Qualitative Methods – This part of the session will explore the constellation of analytical methods included under the heading of qualitative research. We will discuss the purposes and benefits of qualitative research and explore the differences between major types.

Readings:

- Denzin, N. & Y. Lincoln. (2005). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The Sage Handbook of Qualitative Research*, 3rd ed. Thousand Oaks, CA: Sage, 1-32.
- Edmondson, A. C., & S. E. McManus (2007). Methodological fit in management field research. *Academy of Management Review* 32(4): 1246-1264.
- Eisenhardt, K. M., M. E. Graebner, & S. Sonenshein (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal*, 59(4): 1113-1123.
- Sutton, R. I. (1997). The virtues of closet qualitative research. *Organization Science*, 8(1): 97-106.

Application

During this part of the session, we will examine exemplar articles that employ the research designs discussed during the morning sessions. Students will be responsible for identifying and explaining the major methods used, as well as why the method in each article was appropriate for the research question.

Readings:

Refer to the following table for reading assignments. Citations are listed below the table. Students should be prepared to summarize each assigned article and lead discussion on its analytical method.

| Article | Readers |
|-------------------------------|-----------------------------------|
| Adler & Adler (1988) | Best, Darden, McCrowe, Wilson |
| Clark et al. (2010) | Binkley, Durham, Nau, Wise |
| Dutton & Dukerich (1991) | Bryant, Eghan, Rutherford |
| Eisenhardt & Bourgeois (1988) | Carrothers, Graham, Shike |
| Maitlis & Lawrence (2003) | Carter, Henriques, Sofsky |
| Plowman et al. (2007) | Castillo de Valle, Hoover, Tuders |
| Weick (1993) | Chapman, Lee, Whelan |

- Adler, P. & Adler, P. 1988. Intense loyalty in organizations: A case study of college athletics. *Administrative Science Quarterly*, 33(3): 401-417.
- Clark, S., Gioia, D., Ketchen Jr, D., & Thomas, J. 2010. Transitional identity as a facilitator of organizational identity change during a merger. *Administrative Science Quarterly*, 55(3): 397-438.
- Dutton, J. & Dukerich, J. 1991. Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, 34(3): 517-554.
- Eisenhardt, K. & Bourgeois III, L. 1988. Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal*, 31(4): 737-770.
- Maitlis, S. & Lawrence, T. 2003. Orchestral manoeuvres in the dark: Understanding failure in organizational strategizing. *Journal of Management Studies*, 40(1): 109-139.
- Plowman, D., Baker, L., Beck, T., Kulkarni, M., Solansky, S., & Travis, D. 2007. Radical change accidentally: The emergence and amplification of small change. *Academy of Management Journal*, 50(3): 515-543.
- Weick, K. 1993. The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38(4): 628-652.

Project Work

In this part of the session, we will discuss the structure of the qualitative project that students will complete during the course. In addition, we will begin to design the study and interview protocols and discuss expectations of the interviews to be performed before the next session.

Readings:

- Dutton, J. E., Worline, M. C., Frost, P. J., & Lilius, J. 2006. Explaining compassion organizing. *Administrative Science Quarterly*, 51(1), 59-96.

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| Sunday, September 15, 2019 |
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Topic: Analytical Techniques and Research Design

Instructor: Dr. Laura Madden

Theoretical Underpinnings

This part of the session is a discussion of the literature related to performing different types of qualitative analysis. We will compare and contrast different methods and best practices for analyzing qualitative data.

Readings:

- Sonpar, K., & Golden-Biddle, K. (2008). Using content analysis to elaborate adolescent theories of organization. *Organizational Research Methods*, 11(4), 795-814.
- Short, J. C., Ketchen Jr, D. J., Shook, C. L., & Ireland, R. D. (2010). The concept of “opportunity” in entrepreneurship research: Past accomplishments and future challenges. *Journal of Management*, 36(1), 40-65.
- King, N. 2004. Using templates in the thematic analysis of text. In Cassell, C. & Symon, G. (Eds.). *Essential guide to qualitative methods in organizational research* (pp. 256-70). Thousand Oaks, CA: Sage.

Application

In this portion of the session, we will work on using the techniques described in the articles above to analyze data. Datasets will be provided through Canvas and students should download CATScanner and QDA Miner Lite (Freeware version) **before** coming to class. Additionally, datasets will be provided in

Canvas to be used during this session.

Links to Software:

QDA Miner Lite: <https://provalisresearch.com/products/qualitative-data-analysis-software/freeware/>

You do not need to learn the software but the more you play with the software, the more you will get out of the course.

CATscanner (freeware): <http://www.amckenny.com/CATScanner/download.php>

Project Work

Students will define their research question and begin to analyze interview data during this session.

Sunday, October 13, 2019

Topic: Presenting Qualitative Research and Student Presentations

Instructor: Dr. Laura Madden

In the morning session, students will present their research projects. In the afternoon session, we will reflect on the theoretical underpinnings of qualitative inquiry and literature on the performance of qualitative study in addition to the process of performing qualitative research.

Sunday, November 10, 2019

Topic: Covariance-based and Partial Least Squares - Structural Equations Modeling (CB- and PLS-SEM)

Instructor: Dr. Torsten Pieper

Please refer to the materials and assignments provided in Canvas.