

SOWK 721

Data Driven Decision Making in Social Services

3 Units

Spring 2021 Section: 67713

Instructor: Eugenia L. Weiss, PsyD, LCSW, MSW, MA

Email: Eugenia.weiss@usc.edu

Course Days: Wednesdays 5pm to 7pm Pacific

Virtual Office Hours: 4pm Pacific and/or by Appointment

Course Location: VAC

I. COURSE PREREQUISITES

II. CATALOGUE DESCRIPTION

This course serves as a practical introduction to using quantitative administrative data to identify trends, track performance, evaluate programs, and drive decision making.

III. COURSE DESCRIPTION

Leaders and innovators in the world of social work must be conversant in data. In the contemporary social service and policy landscape, funders are increasingly concerned with seeing concrete evidence to support the continuation of programs and policy makers are increasingly demanding data to support policy change. Fortunately, administrative data, social media data, program evaluation, and community needs assessments are all readily available sources of data which are increasingly being used to push for social justice and meaningful program development and policy change. This course covers research methodologies and statistics, but with a focus on their application as leaders and innovators. The purpose is to provide students with the practical and conceptual skills needed to read, understand, analyze, interpret, and present findings from data which appear in the academic literature, in technical reports, and which are generated through agency operations. Learning how to interpret statistics, visual presentations of statistics, and conceptualizing the measurement and rigorous assessment of new innovations and policy change initiative will be emphasized. Ethical considerations and practical issues on using data originally collected for non-research purposes will also be discussed. The course also introduces students to developments in data science and artificial intelligence which are emerging as new methods to analyze big data within social work. Assignments will be oriented around learning to read and interpret data in the scientific literature and in technical reports, and developing the skills needed to conduct a literature review that explores potential social justice problems to be explored in the student's emerging capstone innovation tied to the Social Work Grand Challenges.



IV. COURSE OBJECTIVES

Objective #	Course Objectives
DSW #1	1. Confront, evaluate, and use large ideas grounded in the Grand Challenges for Social Work as defined by the American Academy of Social Work and Social Welfare (AASWSW).
DSW #2	2. Leverage evidence from secondary sources in addition to primary data collection strategies to assess the existing social and practice landscape as a basis for designing new responses to complex social problems.
DSW #3	 Apply relevant social work and social science theories of problem causation to develop ideas for change, program or policy implementation, and evaluation.

V. COURSE FORMAT / INSTRUCTIONAL METHODS

This course follows a "service-learning" model. Students will be asked to develop assignments that align and inform broader policy objectives related to the Social Work Grand Challenges. As such, students are given the opportunity to apply their methodological training to a problem that is immediately relevant to the field at large.

Weekly units are organized as a combination of lecture/discussion of academic literature, technical reports, and other available data sources. In order to solidify connections between the topics covered and Social Work practice and policy, asynchronous lectures will include speakers from the community who will describe the manner in which data are being utilized by their agencies.

VI. STUDENT LEARNING OUTCOMES

The following table lists the nine Social Work core competencies as defined by the Council on Social Work Education's 2015 Educational Policy and Accreditation Standards:

Student Learning Outcomes		
1	Introduce students to how to read research with an understanding of the basics of	
	statistical methods [DSW #1]	
2	Facilitate the analysis and discussion of current research, best practices, and gaps in	
	the literature related to their Grand Challenge [DSW #1]	
3	Introduce students core concepts in univariate statistics, inferential statistics	
	(including statistical significance), and basics of multivariable statistics [DSW #3]	
4	Demonstrate an understanding of how leaders in social service organizations,	
	governmental organizations, and policy advocates use data to inform practice and	
	policy [DSW #6]	
5	Demonstrate an understanding of how to conduct an evaluation of their grand	
	challenge innovation capstone project [DSW #5]	



Demonstrate an understanding of how to visually represent data to tell a compelling story to move innovations forward [DSW #2]

VII. COURSE ASSIGNMENTS, DUE DATES & GRADING

	Assignment*	Due Date	% of Final Grade
Assignment 1:	A "Deep Dive" into the Methods in Academic Literature	Unit 6	25%
Assignment 2:	Annotated Bibliography of Literature on a Specific Social Work Problem Related to a Grand Challenge	Unit 10	25%
Assignment 3:	Literature Review on a Specific Social Work Problem Related to a Grand Challenge	Unit 14	40%
Class Participation: Critical Commentary on Topics During Live Ongoing Session & Meaningful Asynchronous Contributions			10%

^{*}Additional details for each assignment to be provided by the instructor – All assignments are due on the designated unit/day of live session at 11:59pm Pacific via the VAC.

Assignment 1: Students will be asked to select three of six research articles provided by the instructor. Students will be asked to provide a brief review of the contents of these articles. Then they will be asked to write a "deep dive" into these three data sources, the methods undergirding the data, and the possible sources of bias are to conclude this assignment.

Assignment 2: To begin to help students develop expertise in the Grand Challenge that may motivate their capstone project, students will be asked to develop an annotated bibliography of relevant studies to be included in their literature review. These annotated bibliographies must include articles that cover the (1) scope and scale of the specific social justice problem, (2) the causes of the problem identified in the literature, and (3) interventions that have been attempted and tested to address this problem (and/or closely related social problems).

Assignment 3: For the final assignment of the semester, students will be asked to submit a literature review of a potential social problem driven by The Grand Challenges of Social work which may become the focus of the student's capstone project in future semesters. This assignment will include literature that (1) explores the scope of the problem, (2) the etiology or causes of the problem, including relevant explanatory theories, and (3) the interventions that have been tested that address the identified problem or closely related problems.

Expectations for Class Participation: Social workers have an ethical imperative to rely on practices and policies supported by empirical evidence. Throughout this course, students will be challenged to critically evaluate research findings encountered – particularly those that are cited as justification for either maintaining the practice/policy status quo or as a call for change. In both discussions and written assignments, students are expected to draw upon data when arguing a particular point and to make explicit those assumptions that fall outside of the evidentiary research base. Students are expected to be active and open-minded participants in group discussions. An inclusive classroom environment will be promoted in which a diversity of perspectives emerge and respectful debates ensue. Students should challenge one another (and the instructor) to consider alternatives to one's hypotheses and to play the role of "skeptic."



Expectations for Written Work: All written assignments must be submitted as double-spaced documents, typed with 12-point font and formatted with 1-inch margins. Text citations and references list must be in correct or APA (7th Ed.) format. All sentences must be written in the student's own words. Ideas, information, and concepts that originated with any other source must always be noted as such. Material that is not correctly cited is considered plagiarized and provides grounds for academic discipline. Assignments should be carefully proofed for spelling, grammar, and clarity of meaning.

Other Expectations: Every student should emerge from this course having contributed to our collective knowledge base through the submission of assignments that align with social work values as set forth by the NASW. These include: 1) service (by conducting research that addresses social problems among atrisk populations served by social workers); 2) justice (by using the research to draw informed conclusions about paths for pursuing social change on behalf of vulnerable populations); 3) dignity and worth of the person (by completing analyses that are respectful of individuals, culturally sensitive, and inclusive of diversity in all its form); 4) importance of human relationships (by undertaking research that considers individuals in the context of the family, community, and other social groups); 5) integrity (by conducting ethical research); and 6) competence (by developing statistical literacy skills that the student can carry forth into the field).

Class grades will be based on the following:

Class Grades	Final Grade
3.85 – 4 A	93 – 100 A
3.60 – 3.84 A-	90 – 92 A-
3.25 – 3.59 B+	87 – 89 B+
2.90 – 3.24 B	83 – 86 B
2.60 – 2.89 B-	80 – 82 B-
2.25 – 2.59 C+	77 – 79 C+
1.90 – 2.24 C	73 – 76 C
	Below – 72 C-

Within the USC Suzanne Dworak-Peck School of Social Work, grades are determined in each class based on the following standards which have been established by the faculty of the School: (1) Grades of A or A- are reserved for student work which not only demonstrates very good mastery of content but which also shows that the student undertook a complex task, applied critical thinking skills to the assignment, and/or demonstrated creativity in her or his approach to the assignment. The difference between these two grades would be determined by the degree to which these skills were demonstrated by the student. (2) Grades of B+ indicate work which is judged to be very good. This grade denotes that a student demonstrated a more-than-competent understanding of the material being tested in the assignment. (3) Grades of B indicate work which meets the basic requirements of the assignment. This grade denotes that the student did adequate work on the assignment and met basic course expectations. (4) Grades of B- indicate that a student's performance was less than adequate on an assignment, reflecting only moderate grasp of content and/or expectations. (5) Grade of C indicate a minimal grasp of the assignments, poor organization of ideas and/or several significant areas requiring improvement. (6) Grades between C- and F denote a failure to meet minimum standards, reflecting serious deficiencies in all aspects of a student's performance on the assignment.



As a professional school, class attendance and participation is an essential part of your professional training and development at the USC Suzanne Dworak-Peck School of Social Work. You are expected to attend all classes and meaningfully participate. For Ground courses, having more than 2 unexcused absences in class may result in the lowering of your grade by a half grade. Additional absences can result in additional deductions. For VAC courses, meaningful participation requires active engagement in class discussions and maintaining an active screen. Having more than two unexcused absences in class may result in the lowering of your grade by a half grade. Additional absences in the live class can result in additional deductions. Unless directed by your course instructor, you are expected to complete all asynchronous content and activities prior to the scheduled live class discussion. Failure to complete two asynchronous units before the live class without prior permission may lower your final grade by a half grade. Not completing additional units can result in additional deductions.

VIII. REQUIRED AND SUPPLEMENTARY INSTRUCTIONAL MATERIALS & RESOURCES

Outlined each week in detailed course overview (below).

Course Overview

Date	Unit	Topics	Assignments
Jan 13	1	■ Course Introduction	
Jan 20	2	■ Conducting a Literature Review (What data is out there?)	
Jan 27	3	Critically Consuming Research (and why you should not believe everything you read)	
Feb 3	4	■ How to Evaluate Qualitative and Mixed Methods Research (Data isn't always numbers!)	
Feb 10	5	Administrative Data in Public and Nonprofit Sectors (how researchers and organizational leaders can come together around data and programming decisions)	
Feb 17	6	■ Conceptualizing a Problem (and how to organize the literature and data you've found)	Assignment #1 due
Feb 24	7	Matching Objectives to Data Sources and Methods (doing program evaluation and continuous quality improvement in organizations using data)	
March 3	8	■ Data for Community Needs Assessments (and the importance of measuring what you want to change)	
March 10	9	■ Using Data to Impact Policy Changes	
March 17	10	Foundational Issues in Statistics (and all we can learn from even simple tables)	Assignment #2 due
March 24	11	■ Inferential Statistics (and the relevance of place and time)	



Date	Unit	Topics	Assignments
March 31	12	■ Multivariable Modeling 101: A Conceptual Overview of Linear Regression	
April 7	13	■ Multivariable Modeling 102: A Conceptual Overview of Logistic Regression	
April 14	14	Predictive Analytics and Risk Modeling (and the potential to better target resources)	Assignment #3 due
April 21	15	■ Data Use, Security, and Ethics (and the role of Federal Law and IRBs)	

Unit 1: Course Introduction

January 13, 2021

Topics

- Data and the Grand Challenges of Social Work
- Relationship between organizational leaders and data
- Sources of data
- How to effectively read research articles (including those pesky tables!)

Required Readings / Viewings

- Coulton, Goerge, Putnam-Hornstein, & de Haan: "Harnessing Big Data for Social Good: A Grand Challenge for Social Work" http://aaswsw.org/wp-content/uploads/2015/10/Big-Data-GC-edited-and-formatted-correct-references.pdf
- 2. Rice, E., Kurzban, S., & Ray, D. (2012). Homeless but connected: the role of heterogeneous social network ties and social networking technology in the mental health outcomes of street-living adolescents. *Community Mental Health Journal*, 48(6), 692-698.

Other Resources

Harvard Business Review: "Keep Up with Your Quants" https://hbr.org/2013/07/keep-up-with-your-quants/ar/3

Petering, R., Rice, E., & Rhoades, H. (2016). Violence in the Social Networks of Homeless Youths: Implications for Network-Based Prevention Programming. *Journal of Adolescent Research*, 31(5), 582-605.

Harris, T., Rice, E., Rhoades, H., Winetrobe, H., & Wenzel, S. (2017). Gender Differences in the Path from Sexual Victimization to HIV Risk Behavior Among Homeless Youth. *Journal of Child Sexual Abuse*, 26(3), 334-351.

Rice, E., Craddock, J., Hemler, M., Rusow, J., Plant, A., Montoya, J., & Kordic, T. (2017). Associations Between Sexting Behaviors and Sexual Behaviors Among Mobile Phone-Owning Teens in Los Angeles. *Child Development*.

Social Work Grand Challenges: https://grandchallengesforsocialwork.org/#the-12-challenges

Unit 2: Conducting a Literature Review (What data is out there?)

January 20, 2021

Topics

- The anatomy of a literature review
- What is a good research question in social work?
- Using literature maps
- Scaling the mountain of scientific literature
- Searching for evidence-based practices
- Tips and tricks: learn the lexicon, follow the trail
- How do I know when I am done?

Required Readings / Viewings



- 1. Pautasso, M. (2013). Ten simple rules for writing a literature review. *PLoS Comput Biol*, *9*(7), e1003149. https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1003149
- 2. Winchester, C. L., & Salji, M. (2016). Writing a literature review. *Journal of Clinical Urology*, 9(5), 308-312. https://journals.sagepub.com/doi/full/10.1177/2051415816650133
- 3. Baumeister, R. F., & Leary, M. R. (1997). Writing narrative literature reviews. *Review of General Psychology*, *1*(3), 311-320.

Other Resources

https://libguides.usc.edu/writingguide/literaturereview

Unit 3: Critically Consuming Research

January 27, 2021

"There are lies, damned lies and statistics." – Mark Twain (and others...)

Topics

- Bias as a result of sample strategies
- Bias as a result of measurement strategies: reliability
- Bias as a result of measurement strategies: validity

Required Readings / Viewings

- 1. John Ioannidis "Why Most Published Research Findings are False": http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0020124
- 2. Emily Oster "Flip your thinking on AIDS in Africa" https://www.ted.com/talks/emily_oster_flips_our_thinking_on_aids_in_africa
- 3. The New Yorker "How a Gay-Marriage Study Went Wrong" http://www.newyorker.com/science/maria-konnikova/how-a-gay-marriage-study-went-wrong

Other Resources

Bhattacherjee, Anol, (2012) Chapter 6 Measurement of Constructs. In *Social Science Research: Principles, Methods, and Practices.* Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3

Bhattacherjee, Anol, (2012) Chapter 7 Scale Reliability and Validity. In *Social Science Research: Principles, Methods, and Practices.* Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3

Bhattacherjee, Anol, (2012) Chapter 8 Sampling. In *Social Science Research: Principles, Methods, and Practices*. Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3



Unit 4: How to Evaluate Qualitative and Mixed Methods Research February 3, 2021

Topics

- History of qualitative methods
- Approaches to qualitative methods (e.g. ethnography, narratives, case studies)
- Data collection methods
- Data analytic techniques in qualitative methods
- Review of experimental and quasi-experimental designs

Required Readings / Viewings

- 1. Horwitz SH, Mitchell D, LaRussa-Trott M, et al. (2011) An Inside View of Police Officers' Experience with Domestic Violence. *Journal of Family Violence*. 26(8),617-625. doi:10.1007/s10896-011-9396-y
- 2. Guiffrida DA. (2003). African American Student Organizations as Agents of Social Integration. *Journal of College Student Development*. 44(3),304-319. doi:10.1353/csd.2003.0024
- 3. Bhattacherjee, Anol, (2012) Chapter 10 Experimental Research. In *Social Science Research: Principles, Methods, and Practices.* Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3

Other Resources

Parker L, Deyhle D, Villenas SA. (1999). *Race Is-- Race Isn't: Critical Race Theory and Qualitative Studies in Education*. Westview Press. (Roithmayr, D. "Introduction to Critical Race Theory in Education Research and Praxis" and Ladson-Billings, G. "Just What is Critical Race Theory and What's It Doing in a Nice Field like Education?")

Palinkas, L. A. (2014). Qualitative and mixed methods in mental health services and implementation research. *Journal of Clinical Child & Adolescent Psychology*, 43(6), 851-861.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.



Unit 5: Administrative Data in Public and Nonprofit Sectors (how researchers and organizational leaders can come together around data and programming decisions) February 10, 2021

Topics

- Leaders and evaluators (or researchers) working together
- Defining the problem
- Using existing administrative data
- How leaders incorporate data into their organizations

Required Readings / Viewings

- Card, D., Chetty, R., Feldstein, M., & Saez, E. (n.d.) Expanding access to administrative data for research in the United States. *National Science Foundation*. Retrieved January 11, 2020 from: https://pdfs.semanticscholar.org/a4f5/38bb04fa41323790d02024b637869aea3885.pdf?_ga=2. 102815808.1597860752.1578805217-850795989.1578805217
- 2. Putnam-Hornstein E, Needell B, & Rhodes AE. (2013). Understanding risk and protective factors for child maltreatment: the value of integrated, population-based data. *Child Abuse & Neglect*, *37*(2-3), 116-119. [PMID: 23260115]
- 3. Stuart Buck & Josh McGee: "Why Government Needs More Randomized Controlled Trials: Refuting the Myths" https://craftmediabucket.s3.amazonaws.com/uploads/PDFs/RCT_FINAL.pdf

Other Resources

TBD



Unit 6: Conceptualizing a Problem

February 17, 2021

Topics

- Interventions and problems
- Developing etiological models
- Visualization of concepts

Required Readings / Viewings

- 1. Clapp, J.D. & Madden (in-Press). Alcohol use and problems at the event level: Theory, methods, and interventions. R. Cooke (Ed.), Chapter in *The Palgrave Handbook of the Psychology of Alcohol Consumption*. MacMillan Palgrave.
- 2. Miller, J.H. & Page S.E. (2007) Modeling. Chapter 3 in Complex Adaptive Systems. Princeton Press.
- 3. Palinkas, L. A. (2014). Causality and causal inference in social work: Quantitative and qualitative Perspectives. *Research on Social Work Practice*.

Other Resources

TBD

Unit 7: Matching Objectives to Data Sources and Methods (doing program evaluation and continuous quality improvement in organizations using data) February 24, 2021

Topics

- Data for program evaluation
- Data for continuous quality improvement
- Data for measuring outcomes and accountability

Required Readings / Viewings

- 1. Chris Anderson: "The End of Theory: The Data Deluge Makes the Scientific Method Obsolete" http://www.wired.com/2008/06/pb-theory/
- 2. Coalition for Evidence-Based Policy Making: "Which Study Designs are Capable for Producing Valid Evidence about a Program's Effectiveness?" http://coalition4evidence.org/wp-



 $\underline{content/uploads/2014/10/Which-Study-Designs-are-Capable-of-Producing-Valid-Evidence-of-\underline{Effectiveness.pdf}$

Other Resources

TBD

Unit 8: Data for community needs assessment (and the importance of measuring what you want to change)

March 3, 2021

Topics

- Community-based surveillance methods
- Random sampling-based surveillance methods

Required Readings / Viewings

- 1. Rice, E., Barman-Adhikari, A., Rhoades, H., Winetrobe, H., Fulginiti, A., Astor, R., ... & Kordic, T. (2013). Homelessness experiences, sexual orientation, and sexual risk taking among high school students in Los Angeles. *Journal of Adolescent Health*, 52(6), 773-778.
- 2. Rice, E., Winetrobe, H., & Rhoades, H. (2013). Hollywood homeless youth point-in-time estimate project: an innovative method for enumerating unaccompanied homeless youth. hhyp.org/wp-content/uploads/2013/02/HHYP Point-in-Time Brief 5.pdf
- 3. Putnam-Hornstein E, Webster D, Needell B, & Magruder J. (2011). A public health approach to child maltreatment surveillance. *Child Abuse Review*, 20, 256-273.

Other Resources

Culhane, D. P., Fantuzzo, J., Rouse, H. L., Tam, V., & Lukens, J. (2010). Connecting the Dots: The Promise of Integrated Data Systems for Policy Analysis and Systems Reform. *Intelligence for Social Policy*, Retrieved from http://repository.upenn.edu/spp_papers/146

Engel, R. J., & Schutt, R. K. (2012). Chapter 9 Survey Research. In *The practice of research in social work*. Sage Publications.



Unit 9: Developing Program and Policy Evidence

March 10, 2021

Topics

- Using data for policy change
- How to use secondary data for policy change
- How to use literature reviews to make policy change
- How to effectively communicate with policy makers

Required Readings / Viewings

- 1. Ron Haskins: "Social Programs that Work" http://www.nytimes.com/2015/01/01/opinion/social-programs-that-work.html
- 2. Hyatt, S. (2013). More than a roof: How California can end youth homelessness. *California Homeless Youth Project*. http://cahomelessyouth.library.ca.gov/docs/pdf/More-Than-a-Roof-FINAL.pdf
- 3. Hyatt, S., Walzer, B., & Julianelle, P. (2014). *California's Homeless Students: A Growing Population*. CA Homeless Youth Project, CA Research Bureau, CA State Library. http://cahomelessyouth.library.ca.gov/docs/pdf/CaliforniasHomelessStudents_AGrowingPopulation.p df

Other Resources

TDB

Unit 10: Foundational concepts in statistics

March 17, 2021

Topics

- Introduction to basic statistics
- Types of variables
- Frequency distributions, mode
- Probability distributions
- Mean, median
- Standard deviation

Required Readings

- 1. Hoffman, R. D. (2003). Internet glossary of statistical terms. Retrieved from http://www.animatedsoftware.com/statglos/statglos.htm
- 2. Rhoades, H., Winetrobe, H., & Rice, E. (2015). Pet ownership among homeless youth: Associations with mental health, service utilization and housing status. *Child Psychiatry & Human Development*, 46(2), 237-244.
- 3. Bhattacherjee, Anol, (2012) Chapter 14 Quantitative Analysis: Descriptive Statistics. In *Social Science Research: Principles, Methods, and Practices*. Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3



Other Resources

https://dornsife.usc.edu/mathcenter/probabilty-and-statistics/

Unit 11: Inferential Statistics

March 24, 2021

Topics

- T-tests, Chi-square test (χ^2)
- **ANOVA**
- Correlations

Required Readings / Viewings

- 1. Christie Aschwanden "Not Even Scientists Can Easily Explain p-Values": http://fivethirtyeight.com/features/not-even-scientists-can-easily-explain-p-values/
- 2. Rice, E., Lester, P., Flook, L., Green, S., Valladares, E. S., & Rotheram-Borus, M. J. (2009). Lessons learned from "integrating" intensive family-based interventions into medical care settings for mothers living with HIV/AIDS and their adolescent children. *AIDS and Behavior*, 13(5), 1005.
- 3. Winetrobe, H., Rhoades, H., Rice, E., Milburn, N., & Petering, R. (2017). "I'm not homeless, I'm houseless": identifying as homeless and associations with service utilization among Los Angeles homeless young people. *Journal of Social Distress and the Homeless*, 26(1), 16-24.
- 4. Bhattacherjee, Anol, (2012) Chapter 15 Quantitative Analysis: Inferential Statistics. In *Social Science Research: Principles, Methods, and Practices*. Textbooks Collection. 3. h8p://scholarcommons.usf.edu/oa textbooks/3

Other Resources

https://dornsife.usc.edu/mathcenter/probabilty-and-statistics/



Unit 12: Multivariable Modeling 101: A Conceptual Overview March 31, 2021

"All models are wrong, but some are useful" – George E.P. Box

Topics

- Linear regression
- More about positive versus negative relationships in statistics

Required Readings / Viewings

- 1. "The Discovery of Statistical Regression": http://priceonomics.com/the-discovery-of-statistical-regression/
- 2. Blosnich, J. R., & Andersen, J. P. (2015). Thursday's child: the role of adverse childhood experiences in explaining mental health disparities among lesbian, gay, and bisexual US adults. *Social Psychiatry and Psychiatric Epidemiology*, 50(2), 335-338.

Other Resources

https://dornsife.usc.edu/mathcenter/probabilty-and-statistics/

Unit 13: Multivariable Modeling 102: Logistic Regression April 7, 2021

Topics

- Logistic Regression
- More about statistical control

Required Readings

1. Rice, E., Monro, W., Barman-Adhikari, A., & Young, S. D. (2010). Internet use, social networking, and HIV/AIDS risk for homeless adolescents. *Journal of Adolescent Health*, 47(6), 610-613.

Other Resources

https://dornsife.usc.edu/mathcenter/probabilty-and-statistics/

Unit 14: Predictive Analytics and Risk Modeling April 14, 2021

Topics

- Predictive risk modeling
- TAY Triage Tool case study
- Artificial intelligence, machine learning, and the future of predictive modelling

Required Readings / Viewings



- 1. Rice, E. (2013). The TAY Triage Tool: A tool to identify homeless transition age youth most in need of permanent supportive housing. http://www.csh.org/wp-content/uploads/2014/02/TAY TriageTool 2014.pdf
- 2. Rice, E., Holguin, M., Hsu, H. T., Morton, M., Vayanos, P., Tambe, M., & Chan, H. (2018). Linking homelessness vulnerability assessments to housing placements and outcomes for youth. *Cityscape*, 20(3), 69-86.

Other Resources

Putnam-Hornstein, E., & Needell, B. (2011). Predictors of child protective service contact between birth and age five: An examination of California's 2002 birth cohort. *Children and Youth Services Review*, 33(11), 2400-2407.

Rice, E., & Rosales, A. (2015). TAY Triage Tool pilots report. http://www.csh.org/wp-content/uploads/2015/06/TAY-Triage-Tool-Pilots-Report_FINAL.pdf

Unit 15: Data Use, Security, and Ethics (and the role of federal laws and IRBs) April 21, 2021

Topics

- Institutional review boards
- Waivers of informed consent / assent
- Information Practices Act
- Health Insurance Portability and Accountability Act (HIPAA)
- Family Educational Rights and Privacy Act (FERPA)

Required Readings / Viewings

- 1. Currie, J. (2013). "Big Data" versus "Big Brother": On the appropriate use of large-scale data collections in pediatrics. *Pediatrics*, *131* (Supplement): S127-S132.
- Petrila, J. Legal issues in the use of electronic data systems for social science research. <u>https://www.aisp.upenn.edu/wp-content/uploads/2015/09/0033_12_SP2_Legal_Issues_Data_Systems_000.pdf</u>
- 3. Stephanie Simon (2014). Big Brother: Meet the Parents http://www.politico.com/story/2014/06/internet-data-mining-children-107461

Other Resources

NASW code of ethics. (n.d.). Available from http://www.naswdc.org/pubs/code/ USC's IRB. Retrieved from https://oprs.usc.edu/hspp/about/



Sharing Data for Better Results: A Guide to Building Integrated Data Systems Compatible with Federal Privacy Laws:

https://www.nlc.org/sites/default/files/users/user75/Data%20Sharing%20for%20Better%20Results.pdf

STUDY DAYS / NO CLASSES FINAL EXAMINATIONS

University Policies and Guidelines

IX. ATTENDANCE POLICY

Students are expected to attend every class and to remain in class for the duration of the unit. Failure to attend class or arriving late may impact your ability to achieve course objectives which could affect your course grade. Students are expected to notify the instructor by email of any anticipated absence or reason for tardiness.

University of Southern California policy permits students to be excused from class for the observance of religious holy days. This policy also covers scheduled final examinations which conflict with students' observance of a holy day. Students must make arrangements *in advance* to complete class work which will be missed, or to reschedule an examination, due to holy days observance.

Please refer to Scampus and to the USC School of Social Work Student Handbook for additional information on attendance policies.

X. ACADEMIC CONDUCT

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" https://policy.usc.edu/scampus-part-b/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

XI. SUPPORT SYSTEMS

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255



Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086 Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support

Incidents of bias, hate crimes and micro aggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

USC Support and Advocacy (USCSA) – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <u>diversity.usc.edu</u>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime. Provides overall safety to USC community. dps.usc.edu

XII. ADDITIONAL RESOURCES

Students enrolled in the Virtual Academic Center can access support services for themselves and their families by contacting Perspectives, Ltd., an independent student assistance program offering crisis services, short-term counseling, and referral 24/7. To access Perspectives, Ltd., call 800-456-6327.



XIII. STATEMENT ABOUT INCOMPLETES

The Grade of Incomplete (IN) can be assigned only if there is work not completed because of a documented illness or some other emergency occurring after the 12th week of the semester. Students must NOT assume that the instructor will agree to the grade of IN. Removal of the grade of IN must be instituted by the student and agreed to be the instructor and reported on the official "Incomplete Completion Form."

XIV. POLICY ON LATE OR MAKE-UP WORK

Papers are due on the day and time specified. Extensions will be granted only for extenuating circumstances. If the paper is late without permission, the grade will be affected.

XV. POLICY ON CHANGES TO THE SYLLABUS AND/OR COURSE REQUIREMENTS

It may be necessary to make some adjustments in the syllabus during the semester in order to respond to unforeseen or extenuating circumstances. Adjustments that are made will be communicated to students both verbally and in writing.

XVI. CODE OF ETHICS OF THE NATIONAL ASSOCIATION OF SOCIAL WORKERS (OPTIONAL)

Approved by the 1996 NASW Delegate Assembly and revised by the 2017 NASW Delegate Assembly https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English

Preamble

The primary mission of the social work profession is to enhance human well-being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty. A historic and defining feature of social work is the profession's focus on individual well-being in a social context and the well-being of society. Fundamental to social work is attention to the environmental forces that create, contribute to, and address problems in living.

Social workers promote social justice and social change with and on behalf of clients. "Clients" is used inclusively to refer to individuals, families, groups, organizations, and communities. Social workers are sensitive to cultural and ethnic diversity and strive to end discrimination, oppression, poverty, and other forms of social injustice. These activities may be in the form of direct practice, community organizing, supervision, consultation, administration, advocacy, social and political action, policy development and implementation, education, and research and evaluation. Social workers seek to enhance the capacity of people to address their own needs. Social workers also seek to promote the responsiveness of organizations, communities, and other social institutions to individuals' needs and social problems.

The mission of the social work profession is rooted in a set of core values. These core values, embraced by social workers throughout the profession's history, are the foundation of social work's unique purpose and perspective:

Service



- Social justice
- Dignity and worth of the person
- Importance of human relationships
- Integrity
- Competence

This constellation of core values reflects what is unique to the social work profession. Core values, and the principles that flow from them, must be balanced within the context and complexity of the human experience.

XVII. ACADEMIC DISHONESTY SANCTION GUIDELINES

Some lecture slides, notes, or exercises used in this course may be the property of the textbook publisher or other third parties. All other course material, including but not limited to slides developed by the instructor(s), the syllabus, assignments, course notes, course recordings (whether audio or video) and examinations or quizzes are the property of the University or of the individual instructor who developed them. Students are free to use this material for study and learning, and for discussion with others, including those who may not be in this class, unless the instructor imposes more stringent requirements. Republishing or redistributing this material, including uploading it to web sites or linking to it through services like iTunes, violates the rights of the copyright holder and is prohibited. There are civil and criminal penalties for copyright violation. Publishing or redistributing this material in a way that might give others an unfair advantage in this or future courses may subject you to penalties for academic misconduct.

XVIII. COMPLAINTS

If you have a complaint or concern about the course or the instructor, please discuss it first with the instructor. If you feel cannot discuss it with the instructor, contact the lead instructor. If you do not receive a satisfactory response or solution, contact your advisor and/or Dr. Michael Hurlburt, director of doctoral programs for further guidance.