<div align="center">

EPPS 6359
Social Concepts and Measurement
Fall 2018

</div>

Instructor: Vito D'Orazio
Time and Location: Thursday, 4-6:45pm, GR 3.402B (Dallas Lab South)
Contact: dorazio@utdallas.edu   972-883-6212
Office Hours: Wednesday 12:00–2:00, GR 3.108D

Course Goals and Overview

This course teaches students the fundamentals of social concepts, measurement theory, and sensitivity analysis. We will explore methods and technologies for measurement, including scales, typologies, latent traits, and content analysis. For the course project, students will develop a new measure of a social concept in their field of research. This requires students to justify the need to measure the concept on theoretical grounds, to survey the literature for existing measures of the concept, to specify how their measure differs and the logic behind their conceptualization or operationalization, to construct a new measure using an appropriate method, and to conduct a sensitivity analysis using the new measure. The goal is for all students to have a conference-quality paper and presentation prepared by the end of the semester.

There are three learning objectives for this course. The first is to get students to think critically about concepts of interest and the data we use to represent them. The second is to learn techniques for measuring social science concepts. The third is to properly assess the similarities and differences of alternative measures of concepts. These three learning objectives will be assessed through class discussion, homework assignments, and the final project (paper and presentation).

Course Requirements

For each class, be prepared to discuss the week's readings and to extend the discussion to your areas of interest. The applications to your area of interest may require you to conduct additional research on your own.

There will be six homework assignments throughout the semester. Students are required to submit assignments through eLearning by the start of class on the day the assignment is due.

Students are required to complete a final project, which consists of a paper and a presentation in class. To show progress toward the final project, and to provide feedback along the way, students complete two short papers that are also accompanied with a brief, in-class presentation.

Final Grade Composition

Attendance and participation	20%
Homework assignments	30%
Final paper	40%
Final presentation	10%

Attendance and participation (20%)

Submit the homework assignments on time, show up, be attentive, and participate to get full credit. I expect all students to engage in discussion every class. The purpose is not only to demonstrate that you have read, but also that you have thought critically about the readings and are able to apply the topic to your area of interest.

Homework assignments (30%)

Some of these assignments are theoretical, some are methodological, and some are mixed. We will use both R and Stata. Each of the six homework assignments is worth five points. Late assignments will not be accepted. If you miss class, you are still required to submit the assignment. If for any reason you cannot complete the assignment, you must notify me before the assignment is due and we can make arrangements to complete the work. Students are required to submit assignments through eLearning by the start of class on the day the assignment is due.

Final project (50%)

The final project consists of both a presentation (10%) and a paper (40%). For the final project, students will write and present a paper that is suitable for a conference presentation. The final paper should take the form of a research paper prepared for submission to a peer-reviewed journal. For this paper:

- Propose and defend a new measure of some concept of interest

- Construct the new measure using an appropriate method

- Conduct a sensitivity analysis comparing the new measure to existing ones

Be sure to explicitly recognize and justify your assumptions.

Short papers and presentations

Students will write two short papers, and give two presentations, throughout the semester. These papers and presentations are intended to demonstrate progress toward the final project, and to provide students with feedback. The papers will be graded on a three point scale, but these grades will not count toward the final project. The final project is a stand-alone grade.

Short paper 1 introduces the concept that the student will be measuring for her or his

final paper. Survey the literature, choose and critique an existing measure, and propose an alternative conceptualization or operationalization of the concept.

Short paper 2 discusses the ideal method of measuring the alternative operationalization of the concept. Students must also propose a practical method for measuring the concept within the timeframe of this course.

Each short paper will be accompanied by a brief presentation during class, the day the papers are due. During these classes, presentations will acount for 60-90 minutes of class time.

Grade Scale

A	$\geq 93\%$	B	= 83-86%	C	73-76%
A-	= 90-92%	B-	= 80-82%	F	$\leq 72\%$
B+	= 87-89%	C+	= 77-79%		

See `https://catalog.utdallas.edu/2018/graduate/policies` for additional information about university grading policies.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus: `http://go.utdallas.edu/syllabus-policies`.

Required Texts

Note that [De Ayala, 2013] is available electronically from the UTD library. [Collier and Gerring, 2009] is available as well, but not electronically.

- Collier, D. and Gerring, J., editors (2009). *Concepts and method in social science: the tradition of Giovanni Sartori.* Routledge, New York

- De Ayala, R. J. (2013). *Theory and practice of item response theory.* Guilford Publications

- Goertz, G. (2006b). *Social Science Concepts: A User's Guide.* Princeton University Press, Princeton, NJ

Course Outline

Part I – Concepts

Day 1: Importance of Concepts and Measurement   August 23

- Sambanis, N. (2004). What is civil war? conceptual and empirical complexities of an operational definition. *Journal of conflict resolution*, 48(6):814–858

- Hegre, H. and Sambanis, N. (2006). Sensitivity analysis of empirical results on civil war onset. *Journal of conflict resolution*, 50(4):508–535

- Leamer, E. E. (1985). Sensitivity analyses would help. *The American Economic Review*, 75(3):308–313

Day 2: Social Science Concepts I   August 30

- Read the first four chapters of Goertz 2006, and complete Part 1 of homework 1

Day 3: Social Science Concepts II   September 6

- Homework 1 due

- Goertz, G. (2006b). *Social Science Concepts: A User's Guide*. Princeton University Press, Princeton, NJ

Additional Readings

- Jones, C. O. (1974). Doing before knowing: Concept development in political research. *American Journal of Political Science*, 18(1):215–228

Day 4: Applications: Peace and Populism   September 13

- Klein, J. P., Goertz, G., and Diehl, P. F. (2008). The peace scale: Conceptualizing and operationalizing non-rivalry and peace. *Conflict Management and Peace Science*, 25(1):67–80

- Diehl, P. F. (2016). Exploring peace: Looking beyond war and negative peace. *International Studies Quarterly*, 60(1):1–10

- Akkerman, A., Mudde, C., and Zaslove, A. (2014). How populist are the people? measuring populist attitudes in voters. *Comparative political studies*, 47(9):1324–1353

- Mudde, C. (2004). The populist zeitgeist. *Government and opposition*, 39(4):541–563

- Weyland, K. (2001). Clarifying a contested concept: Populism in the study of latin american politics. *Comparative politics*, pages 1–22

Additional Readings

- Pauwels, T. (2011). Measuring populism: A quantitative text analysis of party literature in belgium. *Journal of Elections, Public Opinion and Parties*, 21(1):97–119

- Hawkins, K. A. (2009). Is chávez populist? measuring populist discourse in comparative perspective. *Comparative Political Studies*, 42(8):1040–1067

- Aslanidis, P. (2016). Is populism an ideology? a refutation and a new perspective. *Political Studies*, 64(1_suppl):88–104

Day 5: Concepts and Validity   **September 20**

- Homework 2 due

- Sartori, G. (2009b). concept misinformation in comparative politics. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 1, pages 13–43. Routledge, New York

- Sartori, G. (2009a). Comparing and miscomparing. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 5, pages 151–164. Routledge, New York

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

- Plümper, T. and Neumayer, E. (2010). The level of democracy during interregnum periods: Recoding the polity2 score. *Political analysis*, 18(2):206–226

Additional Readings

- Borsboom, D., Mellenbergh, G. J., and van Heerden, J. (2004). The concept of validity. *Psychological review*, 111(4):1061

Day 6: Conceptual Stretching   **September 27**

- Homework 3 due

- Collier, D. and Mahon, J. E. (1993). Conceptual stretching revisited: Adapting categories in comparative analysis. *American Political Science Review*, 87(04):845–855

- Coppedge, M., Lindberg, S., Skaaning, S.-E., and Teorell, J. (2016). Measuring high level democratic principles using the v-dem data. *International Political Science Review*, 37(5):580–593

- Collier, D. and Levitsky, S. (2009). Democracy: Conceptual hierarchies in comparative research. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 10, pages 269–288. Routledge, New York

- Coppedge, M., Gerring, J., Altman, D., Bernhard, M., Fish, S., Hicken, A., Kroenig, M., Lindberg, S. I., McMann, K., Paxton, P., Semetko, H. A., Skaaning, S.-E., Staton, J., and Teorell, J. (2011). Conceptualizing and measuring democracy: A new approach. *Perspectives on Politics*, 9(02):247–267

Additional Readings

- Kurtz, M. J. (2009). Peasant: Clarifying meaning and refining explanation. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 11, pages 289–314. Routledge, New York

- Goertz, G. (2006a). Assessing the trivialness, relevance, and relative importance of necessary or sufficient conditions in social science. *Studies in Comparative International Development*, 41(2):88–109

- Goertz, G. (2009). Point of departure: Intension and extension. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 7, pages 181–202. Routledge, New York

Day 7: Typologies I   October 4

- Collier, D., LaPorte, J., and Seawright, J. (2012). Putting typologies to work concept formation, measurement, and analytic rigor. *Political Research Quarterly*, 65(1):217–232

- Gerring, J. and Barresi, P. A. (2009). Culture: Joining minimal definitions and ideal types. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 9, pages 241–268. Routledge, New York

- Dunlop, C. A. and Radaelli, C. M. (2013). Systematising policy learning: from monolith to dimensions. *Political studies*, 61(3):599–619

- Vreeland, J. R. (2008). The effect of political regime on civil war unpacking anocracy. *Journal of Conflict Resolution*, 52(3):401–425

Additional Readings

- Collier, D., Laporte, J., and Seawright, J. (2008). Typologies: Forming concepts and creating categorical variables. In Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, chapter 7, pages 152–173. Oxford University Press, Oxford

Day 8: Typologies II   October 11

- Homework 4 due

- Ahlquist, J. S. and Breunig, C. (2012). Model-based clustering and typologies in the social sciences. *Political Analysis*, 20(1):92–112

- Estevez-Abe, M., Iversen, T., Soskice, D., et al. (2001). Social protection and the formation of skills: a reinterpretation of the welfare state. In Hall, P. A. and Soskice, D., editors, *Varieties of capitalism: The institutional foundations of comparative advantage*, chapter 4, pages 145–183. Oxford, New York

- Vabulas, F. and Snidal, D. (2013). Organization without delegation: Informal intergovernmental organizations (iigos) and the spectrum of intergovernmental arrangements. *The Review of International Organizations*, 8(2):193–220

- Elman, C. (2005). Explanatory typologies in qualitative studies of international politics. *International organization*, 59(2):293–326

Additional Readings

- Grävingholt, J., Ziaja, S., and Kreibaum, M. (2015). Disaggregating state fragility: a method to establish a multidimensional empirical typology. *Third World Quarterly*, 36(7):1281–1298

Day 9: Scaling   **October 18**

- Benoit, K., Conway, D., Lauderdale, B. E., Laver, M., and Mikhaylov, S. (2016). Crowd-sourced text analysis: Reproducible and agile production of political data. *American Political Science Review*, 110(2):278–295

- Gerring, J., Pemstein, D., and Skaaning, S.-E. (2018). An ordinal, concept-driven approach to measurement: The lexical scale. *Sociological Methods and Research*

- Skaaning, S.-E., Gerring, J., and Bartusevičius, H. (2015). A lexical index of electoral democracy. *Comparative Political Studies*, 48(12):1491–1525

- Schmidtlein, M. C., Deutsch, R. C., Piegorsch, W. W., and Cutter, S. L. (2008). A sensitivity analysis of the social vulnerability index. *Risk Analysis*, 28(4):1099–1114

Additional Readings

- Hare, C., Armstrong, D. A., Bakker, R., Carroll, R., and Poole, K. T. (2015). Using bayesian aldrich-mckelvey scaling to study citizens' ideological preferences and perceptions. *American Journal of Political Science*, 59(3):759–774

- Slapin, J. B. and Proksch, S.-O. (2008). A scaling model for estimating time-series party positions from texts. *American Journal of Political Science*, 52(3):705–722

Day 10: Exploratory Factor Analysis   **October 25**

- Short paper 1 due

- Blei, D. M. (2014). Build, compute, critique, repeat: Data analysis with latent variable models. *Annual Review of Statistics and Its Application*, 1:203–232

- Sanchez, G. R. and Vargas, E. D. (2016). Taking a closer look at group identity: The link between theory and measurement of group consciousness and linked fate. *Political research quarterly*, 69(1):160–174

- Oliver, J. E. and Wood, T. J. (2014). Conspiracy theories and the paranoid style (s) of mass opinion. *American Journal of Political Science*, 58(4):952–966

- Jong-A-Pin, R. (2009). On the measurement of political instability and its impact on economic growth. *European Journal of Political Economy*, 25(1):15–29

Additional Readings

- Stock, J. H. and Watson, M. (2011). Dynamic factor models. *Oxford handbook on economic forecasting*

- Hanson, J. K. and Sigman, R. (2013). Leviathan's latent dimensions: Measuring state capacity for comparative political research

- Hendrix, C. S. (2010). Measuring state capacity: Theoretical and empirical implications for the study of civil conflict. *Journal of Peace Research*, 47(3):273–285

- Aruoba, S. B., Diebold, F. X., Nalewaik, J., Schorfheide, F., and Song, D. (2016). Improving gdp measurement: A measurement-error perspective. *Journal of Econometrics*, 191(2):384–397

- Rummel, R. J. (1997). Is collective violence correlated with social pluralism? *Journal of Peace Research*, 34(2):163–175

- Tremblay, J., Pedersen, D., and Errazuriz, C. (2009). Assessing mental health outcomes of political violence and civil unrest in peru. *International journal of social psychiatry*, 55(5):449–463

- Sears, D. O., Hensler, C. P., and Speer, L. K. (1979). Whites' opposition to busing: Self-interest or symbolic politics? *American Political Science Review*, 73(2):369–384

Day 11: IRT: One-Parameter and Estimation   **November 1**

- Homework 5 due

- De Ayala, R. J. (2013). *Theory and practice of item response theory*. Guilford Publications. Chapters 1, 2, 3

- Bollen, K. A. (2002). Latent variables in psychology and the social sciences. *Annual review of psychology*, 53(1):605–634

Additional Readings

- Borsboom, D., Mellenbergh, G. J., and Van Heerden, J. (2003). The theoretical status of latent variables. *Psychological review*, 110(2):203

- Van Schuur, W. H. (2003). Mokken scale analysis: between the guttman scale and parametric item response theory. *Political Analysis*, pages 139–163

- Quaranta, M. (2013). Measuring political protest in western europe: Assessing cross-national equivalence. *European Political Science Review*, 5(3):457–482

Day 12: IRT: Two and Three-Parameter Models   November 8

- De Ayala, R. J. (2013). *Theory and practice of item response theory*. Guilford Publications. Chapters 5, 6

- Carroll, R., Lewis, J. B., Lo, J., Poole, K. T., and Rosenthal, H. (2009). Comparing nominate and ideal: Points of difference and monte carlo tests. *Legislative Studies Quarterly*, 24(4):555–591

- Clinton, J. D. and Jackman, S. (2009). To simulate or nominate? *Legislative Studies Quarterly*, 24(4):593–621

Day 13: IRT: Ordered Response Data   November 15

- Short paper 2 due

- De Ayala, R. J. (2013). *Theory and practice of item response theory*. Guilford Publications. Chapters 7, 8

- Treier, S. and Jackman, S. (2008). Democracy as a latent variable. *American Journal of Political Science*, 52(1):201–217

- Pemstein, D., Meserve, S. A., and Melton, J. (2010). Democratic compromise: A latent variable analysis of ten measures of regime type. *Political Analysis*, 18(4):426–449

Day 14: Applications: Human Rights   November 29

- Landman, T. (2004). Measuring human rights: principle, practice and policy. *Human Rights Quarterly*, 26(4):906–931

- Fariss, C. J. and Dancy, G. (2017). Measuring the impact of human rights: Conceptual and methodological debates. *Annual Review of Law and Social Science*, 13:273–294

- Fariss, C. J. (2014). Respect for human rights has improved over time: Modeling the changing standard of accountability. *American Political Science Review*, 108(02):297–318

- Cingranelli, D. and Filippov, M. (2018a). Are human rights practices improving? *American Political Science Review*, pages 1–7

- Cingranelli, D. and Filippov, M. (2018b). Problems of model specification and improper data extrapolation. *British Journal of Political Science*, 48(1):273–274

- Fariss, C. J. (2018). The changing standard of accountability and the positive relationship between human rights treaty ratification and compliance. *British Journal of Political Science*, 48(1):239–271

Day 15: Final Presentations   **December 6**

- Final presentations

Final papers are to be submitted no later than December 10.

Additional Readings

Books

- Goertz, G. and Mahoney, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences.* Princeton University Press

- Zeller, R. A. and Carmines, E. G. (1980). *Measurement in the Social Sciences: The Link Between Theory and Data.* Cambridge University Press, New York

- Saltelli, A., Ratto, M., Andres, T., Campolongo, F., Cariboni, J., Gatelli, D., Saisana, M., and Tarantola, S. (2008). *Global sensitivity analysis: the primer.* John Wiley & Sons

- Ragin, C. C. (2000). *Fuzzy-set social science.* University of Chicago Press

- Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors (2008). *The Oxford Handbook of Political Methodology.* Oxford University Press, Oxford

- Ragin, C. C. (2008b). *Redesigning social inquiry: Fuzzy sets and beyond.* Wiley Online Library

- Gorsuch, R. L. (1983). *Factor analysis.* Hillsdale, NJ: LEA, second edition

Articles

- Kupilik, M. and Witmer, F. (2018). Spatio-temporal violent event prediction using gaussian process regression. *Journal of Computational Social Science*, pages 1–15

- Hegre, H., Østby, G., and Raleigh, C. (2009). Poverty and civil war events: A disaggregated study of liberia. *Journal of Conflict Resolution*, 53(4):598–623

- Khusrav, G., Todd, S., and Donggyu, S. (2013). Common drivers of transnational terrorism: Principal component analysis. *Economic Inquiry*, 51(1):707–721

- Seawright, J. and Collier, D. (2014). Rival strategies of validation: Tools for evaluating measures of democracy. *Comparative Political Studies*, 47(1):111–138

- Elkins, Z. (2000). Gradations of democracy? empirical tests of alternative conceptualizations. *American Journal of Political Science*, pages 293–300

- Paxton, P. (1999). Is social capital declining in the united states? a multiple indicator assessment. *American Journal of sociology*, 105(1):88–127

- Durham, J. B. (2004). Economic growth and institutions: some sensitivity analyses, 1961–2000. *International Organization*, 58(03):485–529

- Sturm, J.-E., Berger, H., and De Haan, J. (2005). Which variables explain decisions on imf credit? an extreme bounds analysis. *Economics & Politics*, 17(2):177–213

- Chakrabarti, A. (2001). The determinants of foreign direct investments: Sensitivity analyses of cross-country regressions. *Kyklos*, 54(1):89–114

- Goertz, G. (2008). Concepts, theories, and numbers: A checklist for constructing , evaluating, and using concepts or quantitative measures. In Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, chapter 5, pages 97–118. Oxford University Press, Oxford

- Ragin, C. C. (2008a). Measurement versus calibration: A set-theoretic approach. In Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, chapter 8, pages 174–198. Oxford University Press, Oxford

- Kotowski, C. (2009). Revolution: Untangling alternative meanings. In Collier, D. and Gerring, J., editors, *Concepts and method in social science: the tradition of Giovanni Sartori*, chapter 8, pages 203–240. Routledge, New York

- Stokke, O. S. (2007). Qualitative comparative analysis, shaming, and international regime effectiveness. *Journal of Business Research*, 60(5):501–511

- Greckhamer, T., Misangyi, V. F., and Fiss, P. C. (2013). The two qcas: From a small-n to a large-n set theoretic approach. *Configurational theory and methods in organizational research*, 38:49–75

- Rihoux, B. (2008). Case-oriented configurational research: Qualitative comparative analysis (qca), fuzzy sets, and related techniques. In Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, chapter 31, pages 722–736. Oxford University Press, Oxford

- Thiem, A. (2014). Membership function sensitivity of descriptive statistics in fuzzy-set relations. *International Journal of Social Research Methodology*, 17(6):625–642

- D'Orazio, V., Landis, S. T., Palmer, G., and Schrodt, P. (2014). Separating the wheat from the chaff: Applications of automated document classification using support vector machines. *Political Analysis*, 22(2):224–242

- D'Orazio, V., Kenwick, M., Lane, M., Palmer, G., and Reitter, D. (2016). Crowdsourcing the measurement of interstate conflict data. *PLOS ONE, forthcoming*

- Salehyan, I., Hendrix, C. S., Hamner, J., Case, C., Linebarger, C., Stull, E., and Williams, J. (2012). Social conflict in africa: A new database. *International Interactions*, 38(4):503–511

- Hendrix, C. S. and Salehyan, I. (2015). No news is good news: Mark and recapture for event data when reporting probabilities are less than one. *International Interactions*, (ahead-of-print):1–15

- Salehyan, I. (2015). Best practices in the collection of conflict data. *Journal of Peace Research*, 52(1):105–109

- Jackman, S. (2008). Measurement. In Box-Steffensmeier, J. M., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, chapter 6, pages 119–151. Oxford University Press, Oxford

- Bollen, K. and Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological bulletin*, 110(2):305

- Hand, D. J. (1996). Statistics and the theory of measurement. *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, pages 445–492

- Blackwell, M., Honaker, J., and King, G. (2015). A unified approach to measurement error and missing data: Overview and applications. *Sociological Methods & Research*, Forthcoming:1–39

- Honaker, J. and King, G. (2010). What to do about missing values in time-series cross-section data. *American Journal of Political Science*, 54(2):561–581