

Advanced Methods: Experimental Research

Dr. Nehemia Geva

Spring 2007

Political Science 606

Time: T 7:00-9:50

Room: 2064 Bush

Office hour: R 3:00 – 4:30

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Required Readings

Electronically shared (pdf files)

Course Description:

The seminar is designed to introduce students to the philosophy and practice of experimental methods in political science.¹ The material will cover: epistemological and ethical issues; utilization of different experimental and quasi-experimental strategies; measurement and data-analysis; critical evaluation of experimental research.

To acquire experientially the basic understanding of the underlying logic and the procedural skills necessary to design, administer, analyze and interpret experimental research, students will go through all these stages focusing on a particular research question that is central to their topical (substantive) field.² Hence, the expected outcomes are: (a) a research paper, that once the actual data have been collected, will lead to a conference presentation; (b) major points to be used to answer a 'prelim' question that addresses issues related to experimental methods in political science.

Course Requirement and Grading:

Term paper (an experimental research paper) (10% presentation, 40% paper)	50%
Two short written reviews	
10%	
Three experimental designs on the basis of non-experimental research -	15%
Number crunching exercises (ANOVA) (x3)	10%
Contribution to class discussions (includes providing discussion pts.	15%
IRB certification	bonus..

¹ The premise used in the seminar is that "Experimentation is very much a trade, like plumbing or carpentry or directing a play: the best way to learn to do so is by apprenticing" Aronson, Wilson and Brewer (1998:100).

² The only element that will not be included in the above sequence is the data collection. Though, students will generate two hypothetical data sets that will be used for statistical analysis.

Points to consider:

Americans with Disabilities Act (ADA) Policy Statement: The Americans with Disabilities Act is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of the Koldus Building, or call 845-1637.

Copyright Statement: The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials review sheets, and additional problem sets. Because these are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

Plagiarism Statement: As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with the definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of the person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty."

TENTATIVE STRUCTURE AND ASSIGNMENTS

1/16/07

Meeting #1: Introduction:

Procedures of our workshop; Explication of expectations; Why experiments: Basic philosophical underpinning of experimental work.

Druckman, James N., Donald P. Green, James H. Kuklinsky and Arthur Lupia. 2006. "The growth and Development of Experimental Research in Political Science" *American Political Science Review* 100(November): 627-635.

Kinder, Donald R. and Thomas R. Palfrey. 1993. "On Behalf of Experimental Political Science" in Kinder, Donald R. and Thomas R. Palfrey (eds.) *Experimental Foundations of Political Science* Ann Arbor: University of Michigan Press.

1/23/07

Meeting #2: Translation of the Research Question to Experimental Methodology

What can be translated to an experiment; Levels of analysis; Phenomenology; Variables and Context; Research questions and hypotheses in the experimental paradigm; Causality.

Assignments:

- (a) *Identify the ID.V and D.V in Suedfeld and Bluck paper- translate the research idea into an experiment. [3-4 pages].*
- (b) *Consider for discussion points Singer's take on the phenomenological approach and White's ideas on causality (submit discussion points for presentation)*
- (c) *Start digesting the other papers as general overviews of experimentation (points from these papers will be useful throughout the semester).*

Suedfeld, P., & Bluck, S. 1988. Changes in integrative complexity prior to surprise attacks. *Journal of Conflict Resolution*, 32, 626-635.

Singer, J. D. 1969. "The Level-of-Analysis Problem in International Relations." In *International Politics and Foreign Policy*, edited by J. Rosenau. New York: The Free Press.

White, P.A., 1990. "Ideas About Causation in Philosophy and Psychology." *Psychological Bulletin* 108:3-18.

Aronson, Elliot., Timothy D. Wilson and Marilynn B. Brewer. 1998. "Experimentation in Social Psychology" in Daniel T. Gilbert, Susan T. Fiske and Garner Lindzey (eds.) *The Handbook of Social Psychology* Vol. I (4th edition) New York: McGraw-Hill.

Davis, D. Douglas and Charles A. Holt. 1992 "Experimental Economics: Methods Problems and Promise". Paper presented at the 26th meeting of the Latin American Econometric Society Meetings, Mexico City, Mexico, Sept. 1 1992.

Ostrom Elinor. 1988. "A Behavioral Approach to the Rational Choice Theory of Collective Action" *American Political Science Review* 92 (1):1-22

McDermott, Rose, 2002 (a). "Experimental Methods in Political Science" *Annual Review in Political Science* 5:31-61.

McDermott, Rose, 2002 (b). "Experimental Methodology in Political Science" *Political Analysis* 10(4):325-342.

1/30/07 Meeting #3: Manipulation of ID.V. and Context (Individuals as unit of analysis)

Assignments:

- (a) Introduce your main research hypotheses (and the underlying logic – including context) [two pages].
- (b) Prepare to present experimental material from papers. Identify the manipulations and the context – suggest plausible alternatives for the manipulation and the context that would be appropriate for the tested hypothesis. (submit points for presentation)
- (c) Consider methodological implications of variations in context

Rosenberg, S.W., L. Bohan, P. McCafferty, and K. Harris. 1986. The image and the vote: The effect of candidate presentation on voter preference. *American Journal of Political Science*, 30: 108-27.

Mintz, A. & Geva, N. 1993. Why Don't Democracies Fight Each Other?: An experimental assessment of the political incentive explanation. *Journal of Conflict Resolution* 37(3): 484-503.

Geva Nehemia and D, Chris Hanson. 1999. "Cultural Similarity, Foreign Policy Actions, and Regime Perception: An Experimental Study of International Cues and Democratic Peace" *Political Psychology* 20(4): 803-827.

Mintz Alex and Nehemia Geva. 1998. "A Prospect-Based Analysis of War Termination" In: Frank Harvey and Ben Mor (eds.), *New Directions in the Study of International Conflict, Crisis and War*. McMillan Pub.

Quattrone George A. and Amos Tversky. 1988, "Contrasting Rational and Psychological Analyses of Political Choice" *American Political Science Review* 82(3): 720-36.

Geva Nehemia and J. Mark Skorick. 2006. "The Emotional Calculus of Foreign Policy Decisions: Getting Emotions out of the Closet." In Redlawsk, David P. (Ed.) *Feeling Politics: Emotion in Political Information Processing*. New York: Palgrave Macmillan.

2/1/07 Special meeting: The shift to experimentation – with Erik Gartzke (special topic and readings TBA)

2/6/07 Meeting #4: Manipulation of ID.V. and context (groups as units of analysis and interdependencies): Exposure to the "Advisory Forum"

Assignments:

- (a) Conversion of a non-empirical study to an experimental design (1)
- (b) Discussion points – implication of using groups as unit of analysis

De Dreu Carsten K. W., Peter J. D. Carnevale, Ben J. M. Emans and Evert van de Vliert. 1994. "Effects of Gain-Loss Frames in Negotiation: Loss Aversion, Mismatching and Frame Adoption" *Organizational Behavior and Human Decision Processes* 60:90-107.

- Semmel Andrew K., and Dean Minix 1979. "Small Group Dynamics and Foreign Policy Decision Making: An Experimental Analysis In *Psychological Models in*
- Geva Nehemia Belinda Bragg and Charles F. Hermann. 2002. "Effects of Primary Group Identity and Decision Rules on Foreign Policy Decision Making Groups: An Experimental Analysis" Paper presented at the 2002 International Studies Association Convention

2/13/07

Meeting #5: Measurement of the D.V. (Reliability and Validity):
Exposure to the Decision Board and the DecTracer;

Assignment:

- (a) *Discussion points on different indicators that are used (behavior, outcomes, process tracing; attitudes, etc.)*
- (b) *Conversion of an non-empirical study to an experimental design (2)*

- Adcock Robert and David Collier. 2001. "Measurement validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review* 95(3): 529-546
- Ford, J. Kevin, Neal Schmitt, Susan L. Schechtman, Brian M. Hulst, and Mary L. Doherty. 1989. "Process Tracing Methods: Contributions, Problems, and Neglected Research Questions." *Organizational Behavior and Human Decision Processes* 43:75-117.
- Chin Michelle, Jon Bond and Nehemia Geva. 2000. "A Foot in the Door: An Experimental Study of PAC and Constituency Effects on Access" *Journal of Politics* 2000, 62(2): 534-549.
- Geva Nehemia, James Mayhar and Mark J. Skorick. 2000. "The Cognitive Calculus of Foreign Policy Decision Making: An Experimental Assessment". *Journal of Conflict Resolution* 2000, 44(4):447-471
- Mintz Alex and Nehemia Geva. 1997. "The Poliheuristic Theory of Foreign Policy Decision Making". In: N. Geva and A. Mintz (ed.) *Decision Making on War and Peace: The Cognitive-Rational Debate*. Lynne Rienner Publ. 1997:81-101.
- Gibson, James L. 1998. "A Sober Second Thought: An Experiment in Persuading Russians to Tolerate." *American Journal of Political Science* 42:819
- Redd, Steve. 2002. "The Influence of Advisers on Foreign Policy Decision Making: An Experimental Study" *Journal of Conflict Resolution* 46(3) 335-365.

2/20/07

Meeting #6: Between, Within and Mixed Designs

Assignment:

- (a) *Prepare to discuss points on the relative utilities of within and between groups designs*
- (b) *Conversion of an non-empirical study to an experimental design (3)*

- Astorino-Courtois, Allison. 1996. "Transforming International Agreements into National Realities: Marketing Arab-Israeli Peace in Jordan" *The Journal of Politics*, 58(4):1035-1054
- Geva Nehemia, Allison Astorino-Courtois and Alex Mintz. 1996. "Marketing the Peace Process in the Middle East: The Effectiveness of Thematic and Evaluative

Framing in Jordan and Israel" In: M. Chatterji (ed.), *Arms, Security and Development*

Mintz, A., N. Geva, S. B. Redd, and A. Carnes. 1997. "The Effect of Dynamic and Static Choice Sets on Political Decision Making: An Analysis Using the Decision Board Platform. *American Political Science Review* 91.

2/27/07

Meeting #7: Simulations

The basics; Differences between experiments and simulations

Assignment:

(a) *Discussion points to compare simulations and experiments: when should we use either of them*

Browning Rufus, P. 1973 "Simulation: Attempts and Possibilities" in In J. Knutsen (ed.) *Handbook of Political Psychology*. San Francisco, Jossey-Bass Publishers, 1973.

Guetzkow Harold and J. J. Valadez. 1981. "Simulation and "Reality": Validity Research" In H. Guetzkow and J. J. Valadez (Eds.) *Simulated International Processes: Theories and Research in Global Modeling*. Beverly Hills, CA:Sage.

Santmire Tara E., Jonathan Wilkenfeld, Sarit Kraus, Kim M. Holley, Toni E. Santmire 1998. "the Impact of Cognitive Diversity on Crisis Negotiation" *Political Psychology* 19(4): 721-748.

Van Belle, Douglas A. 1998. "Balance of Power and System Stability: Simulating Complex Anarchical Environments Over the Internet" *Political Research Quarterly* 51(1): 265-82

Zinnes, Dina A. 1966. "A Comparison of Hostile Behavior of Decision Makers in Simulate and Historical Data" *World Politics* 18(3) 474-502.

3/6/07

Meeting #8: Quasi Experiments and Field Experiments

Assignment: *Submit a draft of your research design*

Campbell, Donald and Julian Stanley. 1967. *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally.

Beer, F.A., Healy, A.F., Sinclair, G.P., & Bourne, L.E. 1987.. War cues and foreign policy acts. *American Political Science Review*, 81, 701-715.

Larson, S.G. 1990. "Information and Learning in a Congressional District: A Social Experiment". *American Journal of Political Science*, 34, 1102-1118.

Herrmann Richard K., Philip E. Tetlock, and Penny S. Visser. 1999. "Mass Public Decisions on Going to War: A Cognitive-Interactionist Framework". *American Political Science Review* 93(3): 553-574.

Schuman, H., & L. Bobo. "Survey Based Experiments on White Racial Attitudes Towards Residential Integration." In Kinder, Donald R. and Thomas R. Palfry (eds.) *Experimental Foundations of Political Science* Ann Arbor: University of Michigan Press.

3/20/07 Meeting #9: Internal and external validity of experimental designs and issues of ethics

Assignments:

(a) *Review paper [3-4 pages]: Evaluate 2 research papers along In. & Ex. Validity*

(b) *Complete IRB certification*

Kruglanski Arie W. and Moshe Kroy. 1976. "Outcome Validity in Experimental Research: A Re-Conceptualization" *Representative Research in Social Psychology* 7:166-178

Mook Douglas G. 1983. "In Defense of External Invalidity" *American Psychologist* 379-387.

Sears, David O. 1986. "College Sophomores in the Laboratory: Influences of a Narrow Data Base on Social Psychology's View of Human Nature." *Journal of Personality and Social Psychology*, 51 (3): 515-530.

3/27/07 Meeting #10: Number Crunching (a)³
Comparisons of means (t tests and ANOVA)

Assignment: *Prepare 2 data sets for your experiment*

Reading: TBA

4/4/05 Meeting #11: Number Crunching (b)
Testing of assumptions; Factorial designs; Repeated measures

Assignment: (a) *Turn in final IRB forms of your study.*

(b) *An ANOVA exercise and results write up*

Reading: TBA

4/11/05 Meeting #12: Number Crunching (c)
Interactions, Simple contrasts and Posteriori- contrasts.

Assignment: *ANOVA exercise (contrasts and trends)*

Reading: TBA

4/18/03 Meeting #13: Number Crunching (d)
Z tests of proportions, Non Parametric Analyses; Effect size and Power.

Assignment: *Exercise: (power and sample size)*

³ The readings will consist of chapters/sections from Schuyler W. Huck.2004. *Reading Statistics and Research* (4th Edition) Pearson Education. and Geoffrey Keppel and Thomas D. Wickens 2004. *Design and Analysis: A researcher's Handbook* (4th Edition) Pearson Education. The pertinent sections will be electronically reserved

Chow, Siu L. 1988. "Significance Test or Effect Size?" *Psychological Bulletin*
103(1);105-110.

Reading: TBA

4/25/05 Meeting #14: Review

Assignment:

(a) *Submit a review paper [4-5 pages] on limitations of experiments and a rebuttal.*

5/2/05 Meeting #15: Papers Session

Assignment:

(a) *Students present their research papers in a conference format – each paper has an assigned reviewer.*