

Strategies and Methods for the Analysis of Continuity and Change

Matthias Reitzle, Ph.D.

Topic: The course provides students with a fundamental synopsis over typical research questions, study designs, analytical strategies and statistical methods in life-span developmental psychology. It starts with a discussion of the research goals of developmental science. Then, typical research questions are connected to appropriate study designs, and ultimately the appropriate analytical strategies and methods. The central message is that all these aspects of developmental research are closely interlocked. That means that at an early stage of research study, designs and measures must be designed to fit the analytical tools with which the researchers plan to answer their questions. In this context, an important question is whether a variable-based approach, a person-based approach, or both should be pursued to gain the maximum insight into the developmental processes at issue.

Method: In the first half of the semester students will give short presentations based on the seminar literature. This does not mean just repeating the content of an article or chapter. Instead, students are assigned roles, e.g., as an advocate of the person approach, or as advocate of the variable approach, or as discussant who is supposed to thoroughly follow the debate and intervene with critical questions. In addition, homework will be given in the form of elaborating an answer to a specific research question, e.g., by creating the most appropriate study design for a particular research question, listing the pros and cons, and also consider the economic aspects of the study design in question. Based on the insights gained in the first half of the semester, students have the opportunity to introduce questions and problems related to their own thesis projects. That means they can immediately make use of the seminar's discussion in the initial phase of their study planning and thereby mutually adjust their design, measures and analytical strategies to each other.

Target Group: Advanced MA students and students in a doctoral program, most appropriately those who are in the planning stage of their thesis. The course will include students from Penn State and the FSU. Language in this course will be English. Participants should have some basic knowledge about purpose and functioning of various data analysis procedures, e.g. analysis of variance, general linear model including structural equation modeling, log-linear models, logistic regressions, and survival analysis.

Grading: At the end of the semester, a written test compiled of multiple choice questions and a few open questions will be taken.

Introductory literature:

Cairns, R. B., Bergman, L.R., & Kagan, J. (Eds.) (1998). Methods and models for studying the individual. Thousand Oaks, CA: Sage.

Hardy, M. A. (Ed.) (1997). Studying aging and social change. Conceptual and methodological issues. Thousand Oaks, CA: Sage.

Overton, W. F. (1998). Developmental Psychology: Philosophy, concepts, and methodology. In W. Damon & R.M. Lerner (Eds.), Handbook of child psychology (Vol. 1, pp. 107-188). New York: Wiley.