האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

Personal Models of Psychopathology: Personalized Psychotherapy - 51711

Last update 24-09-2023

HU Credits: *2*

Degree/Cycle: *2nd degree (Master)*

Responsible Department: *Psychology*

Academic year: *0*

Semester: *2nd Semester*

Teaching Languages: *Hebrew*

Campus: *Mt. Scopus*

Course/Module Coordinator: *Dr. Gal Lazarus*

Coordinator Email: *gal.lazarus@mail.huji.ac.il*

Coordinator Office Hours: *By appointment*

Teaching Staff:

Dr. Gal Lazarus

Course/Module description:

Psychological processes occur within individuals over time in a manner that is often nontrivially specific to each individual. The heterogeneity in the dynamic mechanisms underlying processes such as mental well-being and distress poses a formidable challenge to the identification of generalities. The field of idiographic psychological science starts off with this recognition, and harnesses it to better measure, model, and understand individuals en route to attaining more meaningful generalizability and efficient interventions. Idiographic research capitalizes on intensive longitudinal methods, which involve sequences of repeated measurements sufficiently frequent to allow characterizing change process at the individual level.

The course will provide a foundational exploration to the practice of person-specific measurement, analysis, and interpretation. It commences by presenting the statistical and theoretical rationale for the implementation of person-specific methods. Subsequently, it introduces the unique characteristics of time-series data, including temporal features (such as trends, cycles, and events), time scale and sampling frequency, contemporaneous and lagged associations, as well as autocorrelation and cross-lagged correlation. The implications of these aspects for formulating research questions, designing studies, data collection and pre-processing, and data modeling will be critically examined. Various modelling techniques, including P-technique Factor Analysis, Network Analysis / Vector Autoregression, GIMME, Regression and Machine Learning, and Latent Profile Analysis will be practiced. The course imparts only basic analytic methods, and equipes students for future independent expansion of their knowledge.

Course/Module aims:

To equip students with a comprehensive understanding of the underlying rationale for employing idiographic research methods and to enhance their proficiency in applying these methodological tools within their research projects.

Learning outcomes - On successful completion of this module, students should be able to:

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

a. Evaluate the limitations arising from ignoring interpersonal heterogeneity in research in psychology.

b. Gain an in-depth understanding of the rationale for using idiographic research methods.

c. Develop idiographic research questions and design corresponding studies.

d. Gather idiographic data, conduct thorough analyses, and accurately discern resulting insights.

Attendance requirements(%):
75

Teaching arrangement and method of instruction: Initial sessions of the course will be dedicated to structured, frontal introduction. Following this foundational phase, students will engage in practical application of idiographic methods including data pre-processing, visualization, and modeling exercises. Contemporary articles will be used to highlight methodological features. All students will be required to submit bi-weekly assignments using the R platform.

Course/Module Content:
1. Background and history of the use of idiogrpahic research methods
2. Heterogenity and ergodicity
3. Time series data
4. Considerations and principles in study design and data collection.
5. Intra-individual regression and multilevel modeling(inc. variable selection and regularization)
6. P-technique Factor Analysis
7. Network Analysis / Vector Autoregression
8. Gaussian Finite Mixture Modeling (Latent Profile Analysis)

Required Reading:
1. Allport, G. W. (1937). Personality: A psychological interpretation. Holt. (Chapter 1)
2. Molenaar, P. C., & Campbell, C. G. (2009). The new person-specific paradigm in psychology. Current directions in psychological science, 18(2), 112-117.
3. Hamaker, E. L., Grasman, R. P., & Kamphuis, J. H. (2016). Modeling BAS dysregulation in bipolar disorder: Illustrating the potential of time series analysis. Assessment, 23(4), 436-446.
4. Wright, A. G., & Zimmermann, J. (2019). Applied ambulatory assessment: Integrating idiographic and nomothetic principles of measurement. Psychological assessment, 31(12), 1467.
5. Stone, A. A., Schneider, S., & Smyth, J. M. (2023). Evaluation of pressing issues in ecological momentary assessment. Annual Review of Clinical Psychology, 19, 107-131.
6. Peugh, J. L. (2010). A practical guide to multilevel modeling. Journal of school psychology, 48(1), 85-112.

7. Beck, E. D., & Jackson, J. J. (2022). Personalized Prediction of Behaviors and Experiences: An Idiographic Person–Situation Test. Psychological Science, 33(10), 1767-1782.
8. Molenaar, P. C., & Nesselroade, J. R. (2009). The recoverability of P-technique factor analysis. Multivariate Behavioral Research, 44(1), 130-141.
9. Vogelsmeier, L. V., Vermunt, J. K., & De Roover, K. (2022). How to explore within-person and between-person measurement model differences in intensive longitudinal data with the R package lmfa. Behavior Research Methods, 1-36.
10. Epskamp, S., & Fried, E. I. (2018). A tutorial on regularized partial correlation networks. Psychological methods, 23(4), 617.
11. Epskamp, S., van Borkulo, C. D., van der Veen, D. C., Servaas, M. N., Isvoranu, A. M., Riese, H., & Cramer, A. O. (2018). Personalized network modeling in psychopathology: The importance of contemporaneous and temporal connections. Clinical Psychological Science, 6(3), 416-427.
12. Bringmann, L. F. (2021). Person-specific networks in psychopathology: Past, present, and future. Current opinion in psychology, 41, 59-64.
13. Fisher, A. J. (2015). Toward a dynamic model of psychological assessment: Implications for personalized care. Journal of consulting and clinical psychology, 83(4), 825.
14. Fisher, A. J., & Bosley, H. G. (2020). Identifying the presence and timing of discrete mood states prior to therapy. Behaviour Research and Therapy, 128, 103596.
15. Scrucca, L., Fop, M., Murphy, T. B., & Raftery, A. E. (2016). mclust 5: clustering, classification and density estimation using Gaussian finite mixture models. The R journal, 8(1), 289.

Additional Reading Material:

Grading Scheme:

Essay / Project / Final Assignment / Home Exam / Referat 70 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 30 %

Additional information: