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| [**iLab**](https://ilab-psychiatry.nl/) **Newsletter**  ***April 2022***  <https://ilab-psychiatry.nl> |
| **News** **New course at Graduate School for Medical Sciences (GSMS), September 2022 - November 2022: Single-subject Study Design to Assess Mental Health (3 ECTS)**  *Course coordinator*: Marij Zuidersma  **Content and aim** Scientific evidence is often derived from group-based (or ‘nomothetic’) studies that yield group-aggregated results, while the need for clinicians, who typically have to provide personalized care, is to answer questions that apply to individuals. Particularly in the presence of great differences between individuals and complex temporal relations between symptoms and behaviours, information at the individual-level may be valuable for personalized treatment decisions, individual predictions, and diagnostics. The single-subject study design can be used to make inferences about individual persons about the nature, onset, and treatment of symptoms. Therefore, the single-subject design is increasingly being used to assess psychopathological processes but it can be used in other domains as well.  This course **aims** to provide the student with the knowledge to evaluate and judge the single-subject study design for different types of research questions, as well as its use for clinical practice. Instead of focusing on technical details, this course is more focused on the clinical and scientific application of the single-subject study in different disciplines.  The course is intended for (Research)Master students and PhD students of GSMS who are interested in learning about single-subject research. During the course you will get the opportunity to perform your own single-subject study and analyze your data. See <https://cursus1.webhosting.rug.nl/gsms/all-gsms-courses/?tx_seminars_pi1%5BshowUid%5D=1496> for more information (accessible with a RUG p-number). Those who are interested can send an e-mail to Marij Zuidersma, [m.zuidersma@umcg.nl](mailto:m.zuidersma@umcg.nl), or Renate Kroese, [r.c.kroese@umcg.nl](mailto:r.c.kroese@umcg.nl). They will let you know when application is open. |
| **Agenda**  [**PETRA**](https://www.petrapsy.nl/)***, training***  **PETRA: PErsonalized Treatment by Real-time Assessment**   |  |  | | --- | --- | | *Onderwerp*: | **Leren werken met dagboekmetingen in de behandeling** | | *Datum*: | 19 mei 2022, 15.00-17.00 uur (aanmelden mogelijk tot 12 mei) | | ***Datum*:** | 22 juni 2022, 15:00-17:00 uur (aanmelden mogelijk tot 15 juni) | | ***Docenten*:** | Dr. Fionneke Bos, Dr. Harriëtte Riese | | ***Meer info*:** | <https://www.rgoc.nl/rgoc-academie/> |   **iLab meeting, *invitation***   |  |  | | --- | --- | | *Title*: | **First qualitative results VRelax trial (Relax XL) & sneak peak VRelax N=1 study** | | *Speaker*: | **Dr. Catheleine van Driel** | | ***Date*:** | **19 May 2022**, **16:00-17:00 uur** | | ***Location*:** | follows | | ***Summary*:** | The optimalisation phase of Relax XL has just been completed and in this presentation a first overview of the results will be discussed. This will be followed by a proposal to test an adapted version of VRelax XL in patients with a psychotic disorder using an N=1 design | | ***Information*:** | [Virtual Reality Mental Health](https://vrmentalhealth.nl/), <https://vrmentalhealth.nl/vrelax-ontspanning/> |   **Course** *(see also**News)*   |  |  | | --- | --- | | *Title*: | **Single-subject Study Design to Assess Mental Health (3 ECTS)** | | *Coordinator*: | **Dr. Marij Zuidersma** | | ***Date*:** | September 2022 - November 2022 | | ***Information*:** | <https://cursus1.webhosting.rug.nl/gsms/all-gsms-courses/?tx_seminars_pi1%5BshowUid%5D=1496> (accessible with a RUG p-number); Marij Zuidersma, [m.zuidersma@umcg.nl](mailto:m.zuidersma@umcg.nl) | | ***Registration*:** | Renate Kroese, [r.c.kroese@umcg.nl](mailto:r.c.kroese@umcg.nl) | |
| **New employees**  Hi,  I am Moritz Hausmann and currently in the third year of the Psychology Bachelor in Groningen. Supervised by Sanne Booij and Laura Bringmann, I will write an external bachelor thesis at the iLab. For this, I will assist in the data collection for PRoSPECTs. Ultimately, PRoSPECTs data will be combined with the basic anamnesis list (BAL) of the University Center of Psychiatry (UCP) to predict psychiatric outcomes. In my thesis, I look at how good the BAL data on its own can predict the amount of care that UCP patients received. Because this intake questionnaire has been filled out over 3000 times, non-linear statistical learning models can be fitted for prediction. But will they do a better job than linear regression? And how well can healthcare usage be predicted by the relatively limited information found in the BAL? I hope to answer these questions while writing my thesis.  Y:\staff\umc\Psy\iLab\Gerda Bloem overdracht\iLab Nieuwsbrief\Final iLab newsletters\Maart 2022\Foto Dennis Buwalda.pngHi everybody!  My name is Dennis Buwalda, I am currently in my fourth year of the study applied psychology at the Hanzehogeschool. I am joining the PRoSPECTs research project for half a year under the supervision of Sanne Booij. Through my knowledge of my current study and my previous study (of education) in IT, I hope to do my part in contributing to the PRoSPECTs research. Furthermore, I hope to gain a lot of new knowledge and learn many new things during my internship! I look forward to meeting everyone on the team soon, physically or online. |
| [**Datacamp**](https://www.datacamp.com/)**, learn R, Python & Data Science Online**  ***Written bij Dener Cardoso Melo***  DataCamp is an interactive online platform where you can learn about data science and programming languages, like R and Python. The iLab has a premium subscription that can be used upon request. With this, you can have access to over 300 courses on different statistical methods and how to code in R and Python. The courses follow a “learn by doing” approach, with several exercises and projects for you to practice the course content. Additionally, you can do everything on their environment, from watching the lectures to writing your code and analyzing data. DataCamp has its own workspace that functions as an online R/Python environment, so no need to have the software installed in your computer to follow the courses.  If you are interested in working with Datacamp via the iLab please contact Marij Zuidersma, [m.zuidersma@umcg.nl](mailto:m.zuidersma@umcg.nl)  **Alternative:** learning about R and RStudio and the interaction between them**:** [Getting started in R and RStudio](http://milton-the-cat.rocks/learnr/r/r_getting_started/#section-overview) **by Andy Field** |
| **Upcoming symposia, conferences**  **11-13 May 2022, Maastricht. Voorjaarscongres Nederlands Vereniging voor Psychiatrie,** <https://www.nvvp.net/voorjaarscongres>  **12-13 May** 2022, Groningen - MartiniPlaza. 11th Conference Supporting Health by Technology, organized by The Health Psychology group of the University Medical Center Groningen and the Centre for eHealth & Wellbeing Research of the University of Twente, <https://healthbytech.nl/>  **10 June** 2022, Assen. 8e Middagsymposium Chronotherapie Netwerk Nederland (CNN), <https://www.chronotherapienetwerk.nl/symposium/>  **13-16 June 2022, Missouri (USA). Society for Ambulatory Assessment (SAA) Conference 2022,** <https://cvent.me/WrPyKG>**,** <https://ambulatory-assessment.org/category/news>  **23-25 June** 2022, Manchester, United Kingdom, 33rd Annual meeting of the Society for Light Treatment and Biological Rhythms (SLTBR), <https://sltbr.org/>  **27-29 June 2022, Tel-Aviv. 14th International Conference of the European Network For Mental Health Service Evaluation (ENMESH),** <https://www.enmesh2022.com/>  **4-7 September 2022, Sofia, Bulgaria. 17th Conference on Computer Science and Intelligence Systems, FedCSIS 2022,** <https://fedcsis.org/>  **13-14 September 2022, Leuven. Belgian-Dutch Network ESM Research expert meeting**  For more information about the Belgian-Dutch Network for ESM Research in Mental Health [click here](https://esm-network.eu/).  **6 October 2022, Afscheidssymposium Ybe Meesters, Titel: Chronobiologie in de psychiatrie: heden, verleden en toekomst.**    **Please let us know which conferences you have planned to attend so we can update each other!** |
| **Recent publications in the spotlight**  *Tieks A, Oude Voshaar RC, Zuidersma M.*  [Daily associations between affect and cognitive performance in older adults with depression and cognitive impairment: a series of seven single-subject studies in the Netherlands.](https://pubmed.ncbi.nlm.nih.gov/35177005/)  BMC Geriatr. 2022 Feb 17;22(1):133. doi: 10.1186/s12877-022-02797-y.  **Summary,** by *Alieke Tieks*  Comorbidity between depression and cognitive impairment is high in older adults. This increases the disease burden disproportionally, but also leads to uncertainty in diagnosis and treatment decisions. Therefore, insight into the interrelation between emotion and cognitive performance within individual patients in the context of their daily lives may be helpful. In this single-subject study seven older adults with depression and cognitive impairment filled in an electronic diary for 63 consecutive days including a questionnaire evaluating how they felt (affect) and a cognitive test. We found that the associations between affect and cognitive performance differed per person in direction, strength and sign. These results highlight the heterogeneity in the daily associations between affect and cognitive performance and stress the relevance of single-subject studies. Implementing single-subject studies in clinical practice may provide an important first step towards more personalized psychiatric care. The full article can be accessed through this link: <https://rdcu.be/cHfoU>  *van der Tuin S, Balafas SE, Oldehinkel AJ, Wit EC, Booij SH, Wigman JTW.*  [Dynamic symptom networks across different at-risk stages for psychosis: An individual and transdiagnostic perspective.](https://pubmed.ncbi.nlm.nih.gov/34871996/)  Schizophr Res. 2022 Jan;239:95-102. doi: 10.1016/j.schres.2021.11.018.  **Summary,** by *Sara van der Tuin*  The clinical staging model distinguishes different stages of mental illness. Early stages, are suggested to be more mild, diffuse and volatile in terms of expression of psychopathology than later stages. This study aimed to compare individual transdiagnostic symptom networks based on intensive longitudinal data between individuals in different early clinical stages for psychosis. It was hypothesized that with increasing clinical stage (i) density of symptom networks would increase and (ii) psychotic experiences would be more central in the symptom networks. Data came from a 90-day diary study, resulting in 8640 observations within N = 96 individuals, divided over four subgroups representing different early clinical stages (n1 = 25, n2 = 27, n3 = 24, n4 = 20). Sparse Time Series Chain Graphical Models were used to create individual contemporaneous and temporal symptom networks based on 10 items concerning symptoms of depression, anxiety, psychosis, non-specific and vulnerability domains. Network density and symptom centrality (strength) were calculated individually and compared between and within the four subgroups. Level of psychopathology increased with clinical stage. The symptom networks showed large between-individual variation, but neither network density not psychotic symptom strength differed between the subgroups in the contemporaneous (pdensity = 0.59, pstrength > 0.51) and temporal (pdensity = 0.75, pstrength > 0.35) networks. No support was found for our hypothesis that higher clinical stage comes with higher symptom network density or a more central role for psychotic symptoms. Based on the high inter-individual variability, our results highlight the importance of individualized assessment of symptom networks.  *Bringmann LF, Albers C, Bockting C, Borsboom D, Ceulemans E, Cramer A, Epskamp S, Eronen MI, Hamaker E, Kuppens P, Lutz W, McNally RJ, Molenaar P, Tio P, Voelkle MC, Wichers M.*  [Psychopathological networks: Theory, methods and practice.](https://pubmed.ncbi.nlm.nih.gov/34998034/)  Behav Res Ther. 2022 Feb;149:104011. doi: 10.1016/j.brat.2021.104011.  **Abstract**  In recent years, network approaches to psychopathology have sparked much debate and have had a significant impact on how mental disorders are perceived in the field of clinical psychology. However, there are many important challenges in moving from theory to empirical research and clinical practice and vice versa. Therefore, in this article, we bring together different points of view on psychological networks by methodologists and clinicians to give a critical overview on these challenges, and to present an agenda for addressing these challenges. In contrast to previous reviews, we especially focus on methodological issues related to temporal networks. This includes topics such as selecting and assessing the quality of the nodes in the network, distinguishing between- and within-person effects in networks, relating items that are measured at different time scales, and dealing with changes in network structures. These issues are not only important for researchers using network models on empirical data, but also for clinicians, who are increasingly likely to encounter (person-specific) networks in the consulting room. |
| **Recent publications**  *Tieks A, Oude Voshaar RC, Zuidersma M. (in the spotlight)*  [Daily associations between affect and cognitive performance in older adults with depression and cognitive impairment: a series of seven single-subject studies in the Netherlands.](https://pubmed.ncbi.nlm.nih.gov/35177005/)  BMC Geriatr. 2022 Feb 17;22(1):133. doi: 10.1186/s12877-022-02797-y.  *van der Tuin S, Balafas SE, Oldehinkel AJ, Wit EC, Booij SH, Wigman JTW. (in the spotlight)*  [Dynamic symptom networks across different at-risk stages for psychosis: An individual and transdiagnostic perspective.](https://pubmed.ncbi.nlm.nih.gov/34871996/)  Schizophr Res. 2022 Jan;239:95-102. doi: 10.1016/j.schres.2021.11.018.  *Bringmann LF, Albers C, Bockting C, Borsboom D, Ceulemans E, Cramer A, Epskamp S, Eronen MI, Hamaker E, Kuppens P, Lutz W, McNally RJ, Molenaar P, Tio P, Voelkle MC, Wichers M. (in the spotlight)*  [Psychopathological networks: Theory, methods and practice.](https://pubmed.ncbi.nlm.nih.gov/34998034/)  Behav Res Ther. 2022 Feb;149:104011. doi: 10.1016/j.brat.2021.104011. |
| **Share your research news with us!**  **If you know any topics you think might be of interest to the iLab newsletter please share them with us!** |
| **iLab rooms at the UCP**  **If you want to reserve an iLab room to conduct your iLab research you can mail Gerda Bloem: g.m.bloem@umcg.nl for instructions to get access to the Google reservation calendar.** |
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