

# Milan Zarchev

Rotterdam, 3026 EH

Email: [mzarchev@gmail.com](mailto:mzarchev@gmail.com) / [m.zarchev@erasmusmc.nl](mailto:m.zarchev@erasmusmc.nl)

Website: [mzarchev.com](http://mzarchev.com)

Telephone: (+31) 0682113090

## Research profile

I am a medical psychology researcher interested in quantitatively investigating trauma and psychopathology in vulnerable populations. Having seen the diversity of manifestations mental illness can take, I wish to work towards understanding what people with psychiatric diagnoses share in common and how do we conceptualise and effectively intervene on the implicated causal factors. I aspire to address those questions through methodologically robust, theoretically meaningful and maximally transparent research that is incumbent upon our generation of academics.

## Education

2019 – 2021

**Medical Psychology (Research Master)**

**Erasmus MC, Rotterdam**

2014 – 2018

**Psychology (BA Honours)**

**University of Strathclyde, Glasgow**

## Ongoing study collaborations

My hope is that most projects below will produce pre-prints before peer-review. This is up to my co-authors. At this moment, I am allowed to share the R scripts I wrote for each project. All work shared is my own.

- Prevalence of sexual abuse in men with mental illness: a Bayesian meta-analysis (first author); [DOI 10.17605/OSF.IO/4J8CT](https://doi.org/10.17605/OSF.IO/4J8CT)
- A cross-sectional network analysis of affective and psychotic symptoms in a large adolescent sample (first author); [DOI 10.17605/OSF.IO/5MW89](https://doi.org/10.17605/OSF.IO/5MW89)
- Victimization of individuals with serious mental illness living in sheltered housing. (first author); [DOI 10.17605/OSF.IO/UW6HZ](https://doi.org/10.17605/OSF.IO/UW6HZ)
- Do adolescent externalizing and internalizing symptoms increase during COVID (first author); [DOI 10.17605/OSF.IO/WFHJ7](https://doi.org/10.17605/OSF.IO/WFHJ7)
- The effect of bright-light therapy on sleep stability in pregnant women with major depressive disorder: a time-series analysis; [DOI 10.17605/OSF.IO/HR49P](https://doi.org/10.17605/OSF.IO/HR49P)
- Subthreshold PTSD in patients with serious mental illness – a latent class analysis approach; [DOI 10.17605/OSF.IO/UN9HX](https://doi.org/10.17605/OSF.IO/UN9HX)
- Implicit dangerous world beliefs held by child sexual offenders; [DOI 10.17605/OSF.IO/QGJK2](https://doi.org/10.17605/OSF.IO/QGJK2)
- Perceived discrimination mediates the relationship between victimization and social isolation in patients with a severe mental illness: a cross-sectional study; [DOI 10.17605/OSF.IO/JE7TY](https://doi.org/10.17605/OSF.IO/JE7TY)

## Research Experience

**Full-time researcher**

**Erasmus MC, Rotterdam**

December 2020 – ongoing

- Ongoing collaboration with senior faculty of the Erasmus MC psychiatry department on preparing projects of various study designs (longitudinal cohort, intensive time-series, RCT, electronic patient files).
- Providing methodological support to colleagues, ranging from effective communication of descriptive statistics to re-fitting models in the Bayesian analysis framework.

- Introduced modern solutions for efficient and transparent collaboration (working entirely within R projects, version control via Github)

### **Research assistant**

#### **Memory and Aging Lab, Glasgow**

August 2018 – June 2019

- Collected, cleaned and modelled data for an experimental behaviour project investigating the effects of top-down attention on older adult visual working memory
- Analysed results and visualised model outputs under experienced supervision
- Communicated progress and obstacles to other researchers in regular lab meetings

### **Research assistant**

#### **Optima/BIONANO, Glasgow**

September 2017 – April 2018

- Investigated communication effects between prisoners and scientists involved in public engagement in prisons
- Designed novel measures for assessing the effects of engagement with prison populations and attempted validation via factor analysis
- Oversaw qualitative observations on site to review the validity of measures
- Worked within a tight schedule to distribute survey to participating scientists

### **Project assistant**

#### **3D perception and spatial ability, Glasgow**

May 2017 – August 2017

- Worked within a team of skilled researchers exploring the effects of depth perception deficits on real life abilities.
- Gained first-hand experience in translating theoretical knowledge to concrete methods
- Communicated findings to experienced team members

### **Further academic achievements and training**

- Provided support and supervision to fellow student in applying R to their master's thesis
- Selected for a 2-week academic exchange in Tianjin Normal University, China. Attained HSK1 certificate for proficiency in Chinese
- Presented research at British Psychological Society conference
- Certified STEM ambassador

### **Other Experience**

#### **Casework Volunteer**

#### **Glasgow Night Shelter**

2015 – 2019

- Conducting casework with vulnerable people of various backgrounds, organising evidence and prepping them for court hearings.
- Providing support to asylum seekers with histories of various physical and mental health issues. Organising visits to clinics and helping individuals understand diagnoses and treatment options.
- Establishing a relationship of trust and compassion with individuals requiring a personal approach. Substance abuse, chronic depression and suicidal tendencies are amongst the barriers often faced.
- Ensuring an atmosphere of support and stability within the premises. Nominated volunteer of the year by university union as recognition of efforts.

## **Shadow Experience**

### **Municipal Psychiatric Hospital, Haskovo, Bulgaria**

July 2018

- Shadowed a team of psychiatrists in their daily interactions with ward patients
- Gained appreciation of skills required to support people diagnosed with schizophrenia, bipolar disorder and other psychosis related disorders
- Assisted in geriatrics ward, where different symptoms associated with the various types of dementia can be observed

### **Language skills**

English        fluent, written and spoken

Bulgarian     native speaker

Russian        basic; written and spoken

### **Other skills**

- Excellent competency in using R for cleaning, modelling and visualizing data
- Beginner knowledge of Python, Java, C++ syntax;
- Proficient in Microsoft Office products, Github version control and various statistical software packages such as JASP and SPSS