

Award Ceremony (Research) Master's Thesis Prize 2020

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By Philip Spinhoven, 5 January 2021

The Faculty Board has requested the Institutes of our faculty to nominate their top-rated master's and also research master's thesis for the 2020 Faculty Master's and Faculty Research Master's Thesis Prize.

The jury for both awards consisted of five PhD candidates – Nienke Bouw from Education and Child Studies, Lukas Spielberger from Political Science, Siyun Wu from Cultural Anthropology, Manon Schutter from Psychology, and Zhichao Fang from the Centre for Science and Technology Studies – and was chaired by me.

In order to ensure a thorough and uniform assessment, the Faculty Board had provided us with a list of four evaluation criteria. Each thesis was to be evaluated on the basis of scientific quality, creativity in terms of research design and approach, relevance, and readability.

Master's Thesis Prize

As being nominated is a prize in itself, I hereby want to mention the names of the four nominees for the Master's Thesis Prize: Robert-Jan de Rooij from Psychology, Théo Pavlović from Cultural Anthropology, Roos van Lin from Education and Child Studies, and Jon W. Baldwin Quintanilla from Political Sciences.

The jury was pleased to note that the four nominations were all of high scientific quality and social relevance, while at the same time they were very different in terms of design and research methods. After some discussion of the ratings of the members of the jury, we unanimously decided in favour of the thesis nominated by the Institute of Psychology. The award-winning thesis, which was supervised by Dr. Anna van 't Veer, is entitled: *"Data blinding in psychology: Introducing a tool and practical guidelines for common analyses"* by Robert-Jan de Rooij.

To illustrate why Robert-Jan deserves this prize I quote from the jury report:

With his thesis Robert-Jan makes an important contribution not only to the field of Psychology, but to quantitative social sciences in general. The method he proposes, called Data blinding, hides certain aspects of the data, which allows researchers to make data-dependent decisions (e.g., checking assumptions to ensure the right analysis is chosen) without knowing the influence of these decisions on results of their hypothesis test. As biases and p-hacking in psychology have received a lot of negative attention, it is to be applauded that Robert-Jan approaches this topic from a positive perspective. By examining the suitability of different blinding techniques for three common analyses in psychology he contributes to the reliable reporting of research findings and an open science framework in general. More specifically, he used multiple simulation studies to evaluate whether data-blinding techniques interfere with assumption checks, and whether they constrain p-hacking for three common statistical tests in psychology; he also provided guidelines for researchers and data blinders for each step in the data-blinding process. On top of that, he developed a tool that allows data blinders to easily apply the data-blinding techniques to their dataset, for which he independently learned how to make R-packages freely available. The jury was impressed by the amount of work Robert-Jan put into the thesis, the complex material, the advanced statistical analyses, the comprehensive and in-depth analysis, and the clear and transparent writing. To conclude, Robert-Jan was able to combine statistical theory with a practical tool in the form of an R package beyond scientific use in Psychology. In this way he allows researchers to easily blind their data, guard themselves against biases, and trust that their results are not influenced by motivations to find something significant.

Research Master's Thesis Prize

The jury was also asked to nominate a candidate for the FSW Research Master's Thesis Prize. As there was no nomination from Political Sciences, the jury had to choose between the research master's thesis by Mirte Teunissen from Education and Child Studies, and that of Florian Thomas-Odenthal from Psychology. Being forced to make this choice was a kind of Solomon judgement, as both theses received almost identical scores for scientific quality, creativity in terms of research design and approach, relevance, and readability. As in this digital era we could not follow a strategy to reveal the true feelings of the nominating parties by cutting the master theses in two, we decided that "both have won and both must have prizes" one way or the other. But we had to make a choice, and after a constructive and lively discussion of the arguments underlying the individual ratings of the members of the jury, we unanimously decided that our nomination for the LUF Master's Thesis Prize 2020 would go to the thesis put forward by the Institute of Psychology.

Florian Thomas-Odenthal's thesis will thus be nominated for the LUF Master's Thesis Prize. This thesis, supervised by Dr. Marc Molendijk, is entitled: *A healthy diet against depression: strong conclusions from weak evidence. A systematic review.*

To illustrate why Florian deserves to be nominated by our Faculty for the LUF Master's thesis prize, I quote from the jury report:

The potential effect of diet on depression onset and treatment is a topic widely debated in the scientific and popular literature. Florian noticed variance in the strength of the conclusions reported and decided to investigate the sources of different opinions in the scientific community about the possible benefits of diet for depression. He systematically searched databases for narrative reviews, systematic reviews, and meta-analyses on the effects of diet on depression, and independently rated their conclusions as strong, moderate, or weak using a standardized approach (the so-called GRADE-approach). The data showed that narrative reviews were much more likely than meta-analyses to report strong conclusions. The main findings of Florian's thesis were recently published in the international peer-reviewed journal PlosOne, and the paper is receiving widespread media attention.

So, as you may have deduced by now, the second unanimous decision of the jury was to nominate the research master's thesis put forward by the Institute of Education and Child Studies as the award-winning research master's thesis. Mirte Teunissen's thesis, supervised by Prof. Paul Vedder, is entitled: *A Multiple Perspectives Approach to Decision-Making in Foster Care Decision-making for Family Reunification in The Netherlands.*

To illustrate why Mirte deserves this prize I quote from the jury report:

Mirte's thesis is written in a very readable and transparent style for a broad audience, such as people who are working in child welfare and are dealing with out-of-home placements, but more specifically for foster care professionals and family. In writing in this way, she has been able to combine theory and practice and to build a bridge between foster care professionals and the juvenile court. The topic of her thesis has high societal relevance, as an important and challenging task in child welfare is taking decisions on the reunification of children with their birth parents after the children have lived in formal family foster care. As there are no empirical data to guide these decisions, the present thesis tries to generate the necessary evidence-based knowledge for different groups of experts involved in the process of reunification. In her innovative study, Mirte used concept mapping to identify the perspective of foster care professionals as well as the perspective of the juvenile court. Next, the unique criteria of each group were grouped and rated separately by foster care professionals and family judges. Finally, these data were analyzed with non-metric multidimensional scaling analysis and hierarchical cluster analysis, which resulted in a concept map of each perspective. Although the themes of the two concept maps overlapped to a large extent, the juvenile court considered only the foster parent-child relationship, while foster care professionals considered only the birth parent-child relationship, readiness of the family, and preparation and timing adapted to the child. On the basis of these results, Mirte made several suggestions to help the parties involved gain more insight into the perspective of other parties in the reunification process, as a step towards reaching consensus and possibly

improved collaboration. To conclude, Mirte addressed a societal problem in an innovative and rigorous scientific way, and the relevance of her work for the field has already been acknowledged in the form of three accepted papers based on her master's thesis.