

ONDERZOEKERIJ

Research Master Behavioural Science
Radboud University Nijmegen
Report of the limited programme assessment

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Executive summary

The outcome of the external assessment of the research master's programme Behavioural Science (RMBS) of the Radboud University Nijmegen by an NVAO approved panel is positive.

The research master's programme aims to train students in the prevailing theories and methods of modern behavioural science and prepare them for PhD positions and subsequent or related careers in behavioural science in and outside of academia. The programme profiles itself as a research-oriented programme with a multidisciplinary approach of understanding behaviour from a psychological, pedagogical and communication science perspective.

According to the panel, the intended learning outcomes of the programme put a strong emphasis on the development of research skills, which clearly distinguishes this programme from a regular master's programme. The panel suggests to make more explicit references to the programme's multidisciplinary nature and soft skills in the intended learning outcomes.

The panel is positive about the teaching-learning environment, which enables students to achieve the intended learning outcomes. The two-year programme entails a mix of courses on theories and methodologies of research conducted in the behavioural sciences. The programme strongly focuses on training academic research skills and on actively guiding students to identify their own research interests and ambitions. The panel appreciates the strong research focus in courses and research projects. However, the programme focusses mainly on academic research. The panel recommends the programme to also further incorporate an applied research focus in the curriculum.

During the theoretical courses, RMBS aims not to train the students in a certain discipline, but to introduce them to different disciplines. The panel understands and appreciates this conscious choice, but recommends to better communicate this to the students.

The panel thinks highly of the staff members, who are acknowledged scientists in their field. The panel welcomes the highly interactive learning and tutoring environment and the way the programme challenges students to be active, autonomous, and collaborative.

RMBS has a sound assessment policy, and the panel ascertained that the assessment methods in the programme are sufficiently varied, and suitable for the learning outcomes that they are meant to assess. Students finish their programme with carrying out a major research project (26 EC) and writing a final thesis (20 EC). A point of attention is the grading process of the major research project. The panel recommends to increase the transparency of the grading process, for example by independently grading of the research project by both supervisors. Furthermore, the panel suggests giving more weight to the master thesis compared to the major research project.

The panel concludes that the master theses are of a good quality, and convincingly show that students achieve the intended learning outcomes of the programme. Some graduates succeeded in publishing their thesis results, but for the panel it was not clear on what basis a thesis resulted in a published article. It advises to develop a publication policy with rules about authorship after master thesis completion.

Based on the performance of alumni, the panel concludes that the programme very well prepares students for a research career in the field of behavioural sciences.



The chair and the secretary of the panel hereby declare that all panel members have studied this report and that they agree with the judgements laid down in the report. They confirm that the assessment has been conducted in accordance with the demands relating to independence.

Date: 25 May 2021

Rob Ruiter
(chair)

Annemarie Venemans
(secretary)



1. Introduction

1.1 Administrative data

Name of the programme:	Behavioural Science (research)
CROHO number:	60266
Level of the programme:	Master of Science
Orientation of the programme:	Academic
Study load:	120 EC
Location:	Nijmegen
Variant:	Full-time
Expiration of accreditation:	1 November 2021

1.2 Introduction

This report focuses on the assessment of the master programme Behavioural Science (research) of Radboud University Nijmegen. This assessment forms part of a cluster assessment of thirteen research master programmes at seven universities. In total, fifteen panel members participated in this cluster assessment. Appendix A provides an overview of the thirteen participating research masters and the composition of the total panel.

The assessment is based on the standards and criteria described in the NVAO Assessment framework for the higher education accreditation system of the Netherlands 2018 (limited framework). Research master's programmes must meet a number of additional criteria as described by the NVAO (specification of additional criteria for research master's programmes, 2016).

1.3 Panel composition

For every online visit, a (sub)panel was composed, based on the expertise and availability of panel members. Each (sub)panel consisted of five members, including the chair and the student member. The panel that assessed the research master's programme Behavioural Science (RMBS) consisted of the following members:

- Prof. dr. Rob Ruiter (chair), Professor of Health and Social Psychology, Faculty of Psychology and Neuroscience at Maastricht University;
- Prof. dr. Lidia Arends, Professor of Statistics and Research Methodology, Department of Psychology, Education & Child Studies at Erasmus University Rotterdam;
- Prof. dr. Detlev Leutner, Professor of Instructional Psychology, Faculty of Educational Sciences, University of Duisburg-Essen;
- Hanne Oberman, MSc (student member). Methodology and Statistics for the Behavioural, Biomedical, and Social Sciences, Utrecht University (graduated in 2020);



- Prof. dr. Arne Roets, Professor of Social Psychology, Faculty of psychology and educational sciences, Department of Developmental, Personality, and Social Psychology, Ghent University.

The panel was supported by dr. Annemarie Venemans-Jellema, who acted as secretary.

All panel members and the secretary have signed a declaration of independence and confidentiality. In this declaration they affirm not to have had any business or personal ties with the programme in question for at least five years prior to the review.

The NVAO approved the composition of panel on 26 November 2020.

1.4 Working method

Preparation

On 14 January 2021, the panel of the entire cluster held a general online kick off meeting. In this meeting, the panel received an introduction to the assessment framework and discussed the working methods in preparation to and during the online visits.

The programme drew up a self-evaluation describing the programme's strengths and weaknesses. This self-evaluation included a chapter in which the students reflected on the programme. The panel members prepared the assessment by analysing the self-evaluation report and the appendices provided by the institution. The panel also studied a selection of fifteen master theses and the accompanying assessment forms from the programme. The theses selection was made by the panel's secretary based on a provided list of at least fifty theses of the most recent years. In the selection, consideration was given to a variation in assessments (grades) and topics.

The panel members individually formulated their preliminary findings and a number of questions they want to raise during the online visit. The secretary made an overview of these preliminary findings and questions and sent it to the panel members as a starting point for the preparation of the panel during the online visit.

To further ensure that the different panels used the same working method and approach for all thirteen programmes in the cluster, the two chairs and the two secretaries had two additional meetings: one prior to the first visit and one halfway through all the visits.

Online visit

The online visit took place on 25 March, 2021 (see Appendix B). During the preparatory meeting, the panel discussed the preliminary findings and decided which questions to raise in their meetings with the programme representatives. During the visit, the panel spoke with representatives of the management, students, lecturers, alumni, and the Examination Board. Everybody involved in the programme had the opportunity to inform the panel in confidence about matters they consider important to the assessment. No one made use of this opportunity. The panel used the last part of the online visit to evaluate the interviews and had a second meeting with the programme's management to receive answers to any remaining questions. At the end of the visit, the chair presented the panel's preliminary findings and impressions of the programme.



Report

The secretary drew up a draft report based on the panel's findings. This draft report was presented to the members of the panel and adjusted on the basis of their feedback. After adoption, the draft report was sent to the institution for verification of factual inaccuracies. The secretary discussed the programme's comments with the chair, after which the secretary drew up the final report and circulated it to the panel for a final round of comments.

The report follows the four standards such as set of in the NVAO's Assessment Framework 2018 (limited framework): 1) the intended learning outcomes, 2) the teaching-learning environment, 3) assessment, and 4) achieved learning outcomes. Regarding each of the standards, the assessment panel gave a substantiated judgement on a three-point scale: meets, does not meet, or partially meets the standard. The panel subsequently gave a substantiated final conclusion regarding the quality of the programme, also on a three-point scale: positive, conditionally positive, or negative.

Development dialogue

Although clearly separated from the process of the programme assessment, the assessment panel members and programme representatives met to conduct the development dialogue, with the objective to discuss future developments of the programme in light of the outcomes of the assessment report.



2. Review

2.1 Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Findings, analysis, and considerations

The Research Master Behavioural Science (RMBS) is offered by the Behavioural Science Institute (BSI), a research institute of the Faculty of Social Sciences (FSS) of the Radboud University Nijmegen (RU). BSI consists of seven research programmes: Behaviour Change and Well-Being, Communication & Media, Experimental Psychopathology and Treatment, Developmental Psychopathology, Learning and Plasticity, Social Development, and Work, Health and Performance. Staff members are also part of one of the teaching institutes: the School of Psychology, the School of Pedagogical and Educational Sciences, or Communication Science.

The research master's programme aims to train students in the prevailing theories and methods of modern behavioural science and to prepare them for PhD positions and subsequent or related careers in behavioural science in and outside of academia. RMBS is specifically characterised by its multidisciplinary approach of understanding behaviour from a psychological, pedagogical and communication science perspective. The panel recognises that the programme has a very strong and research-oriented profile with an emphasis on human behaviour. Its profile pays ample attention to the multidisciplinary functioning of its students in an international environment.

The programme defined 21 intended learning outcomes divided into five categories following the Dublin descriptors: 'knowledge and understanding', 'applying knowledge and understanding', 'making academical judgements', 'communication', and 'skills for learning'. According to the panel, these intended learning outcomes adequately represent the high standards suitable for a research master's programme.

However, the panel is of the opinion that the intended learning outcomes are rather broadly articulated and could be more tailored to the programme's aims and current views on important professional skills. For example, the panel would have expected more explicit references to the programme's multidisciplinary nature, since this is presented as characteristic for RMBS. Similarly, the programme's focus on soft skills, such as self-regulation and awareness of cultural diversity in a globalising world, could be expressed more clearly. The panel noted that these professional skills are already present in the programme, but not explicitly in the intended learning outcomes. Therefore, it advises updating the intended learning outcomes to better align with the programme's profile and teaching-learning environment.

Conclusion

The panel concludes that the programme's profile and intended learning outcomes adequately represent the high standards suitable for a research master's programme, aimed to train students to become independent researchers. The programme therefore meets standard 1.



2.2 Teaching-learning environment

The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.

Findings, analysis, and considerations

Curriculum

The two-year fulltime programme (120 EC) entails a mix of courses of theories and methodologies of research conducted in the behavioural sciences. Courses are divided in four main categories: 1) theory, 2) methods and statistics, 3) professional skills, 4) research skills. A complete outline of the curriculum can be found in Appendix E.

The theoretical courses consist of an introduction course (1 EC), five theme courses (each 4 EC), and one elective course (4 EC). To provide an overview of the research of BSI, and to bind students as a cohort, students start with an introduction course 'State of the Art'. Students choose five out of thirteen theme courses, which are multidisciplinary courses, combining theories and recent theoretical developments from psychology, education, and communication science. The elective course can be an additional theme course of the programme, or a course from another programme. The Examination Board (EB) has made a list of courses from other programmes that are approved. Students are free to choose their theme and elective courses, providing them with the opportunity to create their own focus of interest.

The programme includes three compulsory statistics courses (in total 16 EC) and two compulsory research method courses (in total 7 EC). Students the panel met during the online visit spoke highly about the quality of these courses. Candidate students with too little basic knowledge of and skills in statistics and research method are advised to follow online courses in statistics and/or read a research methods book that is used at Radboud University.

Professional research skills are trained in the courses 'Professional Skills for Researchers' (4 EC), 'Philosophy of Behavioural Science' (4 EC), and by attending 'BSI Workshops' (1 EC). In these courses, students learn for example the ethics of research, the process of academic publishing and grant proposals, and to comment on the papers and proposals of others. Students are taught the necessary writing and presentation skills they need to share their research findings. In the 'BSI Workshops' students gain insight in the international academic field of behavioural science.

Students apply their acquired knowledge in conducting their own research during their 'Minor Research Project' (12 EC) and 'Major Research Project' (51 EC). For their 'Minor Research Project' in the first year, students choose a topic from a list or propose their own ideas, and work in pairs (in groups of three as of 2020-2021). In the second year, students set up and carry out their own research project supervised by one or more BSI-researchers. The 'Major Research Project' consists of a 'Major Research Proposal' (5 EC), 'Major Research Project' (26 EC), and a 'Master thesis' (20 EC). The aim of the 'Major Research Project' is to demonstrate that a student is able to conduct academic research under supervision and that (s)he has good research skills and an academic attitude. The aim of the thesis is to demonstrate that the student is able to address a significant research question, to critically analyse theories and relevant literature, to operationalise the research question, to analyse, interpret and reflect on the research findings, and to present the findings in the form of a scientific



paper. The topic and supervisors of the 'Major Research Project' must be different from the topic and supervisors of the 'Minor Research Project'. This way, the student becomes acquainted with different researchers and research traditions within the BSI. The programme encourages students to do (part of) their research project abroad. To facilitate students to go abroad, the BSI has initiated the BSI travel grants for RMBS students. Depending on the length of their stay and the country, students can apply for a maximum of 800 euro.

The panel considers the curriculum strong in its focus on multidisciplinary. Also, there is a good balance between the substantive content and the research skills typically expected from a research master's student. The panel is impressed by the attention paid to academic research training and the development of research skills. However, according to the student chapter, there is no separate course on qualitative research methods. The panel encourages the programme management to consider whether to include some qualitative research method in the curriculum, especially for students who have a more applied research focus.

The panel finds the broad range of theoretical theme courses a strong point and recognises that it allows students to build their own curriculum, in line with their interest. The panel learned that the main aim of the programme is a focus on research methods and not on specialisation in a certain field. The programme stated during the site visit that it is a conscious choice not to train students in a certain discipline, but to introduce them to different disciplines. However, during the online visit the panel got the impression that students are not always aware of this. Some students like to specialise in certain fields and miss the depth in the theme courses. The panel advises the programme to better communicate the choice for multidisciplinary training and flexibility in the programme rather than disciplinary depth to the students.

Moreover, the panel noted that there is strategic behaviour in choosing theme courses. Students the panel met during the visit based their choice, in addition to their interest, on schedule, type of assessment, and expected leniency of teachers. According to the panel, it is important for the programme to be aware of this phenomenon and take measures to promote choice out of interest rather than study load among students.

The panel appreciates the two research projects in the curriculum. This allows students to engage actively in different research activities, offering ample possibilities for learning to conduct research. Although some students would like the opportunity to do both research projects with the same supervisor, the panel agrees with the programme that doing research projects on different topics with different supervisors fits with the aim of the programme to train students broadly in behavioural science. The panel is pleased with the opportunities for students to study abroad.

Students and alumni the panel met were very satisfied with the research-oriented nature of the programme. Although the programme also (aims to) prepare(s) students for careers outside academia, during the site visit the panel learned that the students and alumni experience the programme as largely 'academically focused'. They somewhat miss(ed) the preparation for a career outside of academia in courses and research projects. The panel suggests to better incorporate an applied focus in the curriculum, for example by offering more options for a minor project outside academia, or by inviting guest lecturers from non-academic research organisations.

The panel appreciates the attention to ethics given in the programme. Ethical aspects are explicitly covered in the course 'Professional Skills for Researchers' (4 EC). In addition, 'Major Research Projects' need formal approval from the Ethics Committee Social Sciences.

The programme's didactic concept is in line with the overall educational policies and teaching approaches of Radboud University. These focus on activating and challenging education, strong ties



between research and teaching, and many contact hours. The RMBS programme challenges students to be active, autonomous, and collaborative. The programme uses activating teaching methods, which engage active participation in the learning process. The panel applauds this highly interactive learning and tutoring environment with a great deal of attention for the students' individual needs, performance, and development. This small-scale, interactive, intensive, and motivating approach to teaching fits very well with the educational philosophy of this programme. All interviewees confirmed that the educational philosophy not only exists on paper, but is a reality within the programme.

The language of instruction of the programme is English. The programme management substantiates its choice by arguing that the lingua franca of the research domain of behavioural science is English. As RMBS aims to prepare students for a PhD project, or comparable research positions, the programme is of the opinion that it is essential that the entire programme is taught in English as well. The panel endorses this.

Admission and intake

The criteria for applicants to be admitted to the programme are a university BSc in psychology, pedagogical or educational sciences, communication science, biology, artificial intelligence, or a related discipline, good to excellent grades, strong motivation, basic knowledge of research methods and statistics, and an active and passive command of English. Recently, the programme improved the selection process by being explicit in the selection interviews about the expected entrance levels of statistics, as some international students experienced problems. The panel is pleased with this improvement made. It is of the opinion that the selection process is appropriate for this research master's programme.

The programme yearly enrolls on average forty students. The percentage of international students has been about 50% over the last few years. The panel is pleased with this size and diversity of cohorts of new students.

Staff

The panel met with very qualified and dedicated teaching staff. In its opinion, the staff has excellent expert knowledge. The panel appreciates the fact that full professors and associate professors are actively involved in teaching. Because these courses are multidisciplinary, there is a lot of collaboration between staff members from different research programmes.

The content of the programme is closely connected to the research that is executed by BSI, which is visible in the content of the curriculum and the topics of the theses. The staff members are active in numerous national and international research projects. In 2017, BSI was assessed in a research review with positive evaluations in terms of research quality, societal relevance, and viability.

The panel observed that the staff team is very motivated to work with this specific group of students. The students have ample personal contacts with the teaching staff, who are easily accessible.

Of the total number of lecturers, about 64% obtained the University Teaching Qualification (UTQ) certificate and another 5% of them is expected to become UTQ-certified soon. The panel is of the opinion that there is room for improvement in this area. It advises making sure that more staff members do obtain the qualification.



Study progression, feasibility and study guidance

Less than 70% of the students graduate in two years; the rest needs more time. During its visit, the panel discussed the reasons for this proportion of delays. It was told that there are various reasons, including the fact that a considerable group of students are doing a double programme. Another reason is that some students need some extra time for their major project. The panel established that in many cases the delay is caused by the students' calculated strategies to increase their job opportunities and was often unrelated to the difficulty of the programme.

The students, the panel interviewed, indicated that the programme is intensive during the first year, and at times they experienced a heavy study load. According to the panel the programme load is certainly heavy, but given the level of commitment, qualifications, and results of the student population, this seems very suitable for this type of programme. It appreciates that the programme critically monitors the study load and makes adaptations when necessary. For example, currently there are no theme courses at the end of the first year anymore, because of the workload of the minor research projects.

The panel thinks that the students are well guided and monitored during their study. The programme coordinator is the first point of contact for the students for programme specific questions. The programme coordinator works closely together with the student advisor and RU student counseling. For issues of a more personal nature, the students can also visit career advisors and student psychologists of the Radboud University Student Affairs Office. During the visit, students told that they are also assigned to a mentor with whom they meet every other week.

The panel was enthusiastic about the very active student-association 'Maizena'. Almost all students join this association, that offers study-related activities and social activities. RMBS supports Maizena financially.

COVID-19

Due to COVID-19 almost all education of the programme switched to online teaching and assessment in the past year. The panel asked students and teachers about their experience with online teaching. Whilst COVID-19 evidently had an impact on the interaction between student and teachers, both students and teachers were positive about the quick and efficient transition. Because of the relatively small group size, it was quite easy for teachers to interact with all students online.

As stated in the self-evaluation report, most courses within the RMBS already had exams that students can make at home. Exams that were planned on campus were critically reflected on, and in consultation with the EB, adaptations were made. Hereby it was assured that the main goals of the course were still examined, and that the format was compatible with the online context.

The programme started several activities to stimulate students' interaction and well-being. For example, it has created the opportunity for students to meet once a week, in small groups, adhering to COVID-19 measures, in designated rooms on campus. In addition, the programme coordinator scheduled individual meetings about well-being and personal circumstances.

The panel concluded that although the covid-19 situation is not an optimal teaching and learning situation, the programme still allows students to achieve the intended learning outcomes.



Conclusion

The panel concludes that the programme fulfils all specific requirements for the teaching and learning environment of a research master's programme and therefore meets standard 2.

2.3 Student assessment

The programme has an adequate system of student assessment in place.

Findings, analysis, and considerations

The panel noted that the programme developed its assessment policy that provides a description of the final qualifications of the RMBS, a table that shows the contribution of all the courses from the RMBS to the final qualifications, and an explanation how each final qualification is assessed by one or more courses. The panel established that this document is thorough and well-considered, but the latest version dates back to 2015/2016. It recommends the programme to update the policy to the latest developments of the programme.

The panel is pleased that the intended learning outcomes are measured with a variety of assessment methods, such as written exams, series of assignments, oral and poster presentations, take-home exams, and research proposals. Most courses combine several assessment types. The panel found that the study guide of the programme includes detailed information about assessments and their weight. Students the panel met were well-informed about the type of assessment and grading criteria and experienced the assessment of courses to be fair.

Grading of the theses

As described in standard 2, students carry out their major project and write their thesis (51 EC). The total of 51 EC is divided over three components: 5 EC for the major research proposal (fail/pass), 26 EC for the major research project (graded), and 20 EC for the final master thesis (graded).

During the major research project students have at least two supervisors. At the end of the project the student's performance is evaluated by the student themselves and by the supervisors. The student and supervisors organise a 'project evaluation conversation' to reflect on the student's past performance in conducting the research by discussing the grading criteria. After the evaluation conversation, the first supervisor determines the grade for the major research project.

The thesis is evaluated by the first supervisor and an independent reader who was not involved in the project prior to submission of the final thesis. The independent reader is assigned by the RMBS management. These two assessors use separate thesis evaluation forms. These forms are completed prior to the defence meeting and exchanged beforehand between the supervisor and independent reader. Both the supervisor and the independent reader actively question the student during the defence. After the defence meeting, the final grade is based on consensus between the two assessors. If no consensus can be reached, the major research coordinator is informed and (s)he will either be a third assessor or will appoint one.

The panel studied assessment forms and the assessment procedure used for grading the major research project and master thesis. In the panel's opinion, there is too much weight on the grade for the research project graded only by the first supervisor (26 EC) compared with the weight of the master thesis (20 EC). The panel discussed this issue with the programme management and EB, who



presented the distinction between research project and master thesis as a heritage from the past, when the research project and master thesis were still two different projects. The management explained that the number of EC's is based on the amount of work: writing is only a sub-activity and most of the work entails running the study. The panel agrees, but it is also of the opinion that the master thesis is the pinnacle of the programme that reflects the level achieved by students. It suggests giving more weight to the master thesis compared to the research project, also because there is the risk of double grading of the research process when grading the master thesis. The panel advises the programme to critically re-evaluate the total of 51 EC for the 'research Proposal', 'Major research project' and 'Master thesis', and suggests to include in that evaluation also the student chapter in which students ask for more room and choice in pursuing personal interest inside or outside RU, for example by extending the elective component in the second year.

Furthermore, the panel believes that the grading process of the major project is not fully transparent. The panel noted that the qualitative feedback on the research project is in some cases limited and the grade leaves room for non-objective aspects. For example, there was a form with a comment that the student was an excellent host of a visiting professor, which can hardly be considered relevant to grading the research project. The panel recommends to increase the transparency of the grading process, for example by independently grading of the research project by both supervisors.

Examination Board

According to the panel the assessment system is supported and continuously improved by the EB, which is independent, professional, and effective. The EB of the programme assesses yearly four to six courses, evaluates the educational quality of the course and its assessment, yearly audits a random sample of six master theses, looks into the Education and Examination Regulations (EER), and makes suggestions for improvement, and deals with requests for admission and for approval of elective courses, with fraud and plagiarism, requests for judgement, and with complaints from both students and lecturers.

Conclusion

The panel concludes that the programme has an effective assessment system in place and a professional EB. It therefore meets standard 3.

2.4 Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Findings, analysis, and considerations

In order to assess whether the intended learning outcomes are achieved, the panel has studied a sample of fifteen recent theses and has examined the graduates' success in a research career. As described under standard 2 and 3, students finish the research master's programme with carrying out a research project (26 EC) and writing a final thesis (20 EC). The panel was pleased to note that students pass through every stage of conducting the research. If they have not collected data during their minor project and are not going to collect data during their major project, they are obliged to



assist another research master student or BSI staff member in collecting data to get experience with this part of research.

The panel established that the academic level of the master thesis is adequate. All students demonstrate the ability to conduct research at a research master's level. The panel is positive about the quality and academic level of the theses it examined. For some of the theses, however, the panel would have given lower grades than the two original assessors. Although the panel would have awarded lower grades in a number of cases, all theses are sound pieces of research, both theoretically and methodologically, with the necessary carefulness for the validity of conclusions.

In the period 2014 – 2020, 5.8% of the graduates ($N=172$) received the *judicium bene meritum*, 51.7% *cum laude*, and 2.9% *summa cum laude*. Based on the theses that were reviewed by the panel, the panel feels that the high percentage of *cum laude* is not fully justified by the quality of the master theses. Given the stringent admission procedure, the programme should be more demanding compared to regular master's programmes, and as such should probably not have a *cum laude* percentage that is higher than that of regular masters. According to the panel, the major project's grade counts heavily in the *cum laude*. The panel recommends re-evaluating the assessment criteria used, so that *cum laude* truly reflects an extra-ordinary contribution to science. The panel was pleased to note that the faculty's research master programmes already took the initiative to make these rules more stringent as of 2019-2020.

A number of theses could lead to an academic publication. In fact, some graduates succeeded in publishing their thesis results. For the panel it was not clear on what basis a thesis resulted in a published article. It noted that some excellent theses were not published, but some intermediate theses were. The management mentioned that this is likely due to timing, practical issues and students' career choices after graduating, and that there is no clear policy about how many theses should be submitted. The initiative is mostly taken by the supervisor. The panel advises the management to encourage staff members to discuss publication of the master thesis with their students and develop a publication policy.

Another measure of the programme's quality is the employment record of graduates in scientific research. The panel is positive about the career chances of the graduates of the programme. About sixty percent of the graduates start a PhD position after graduation. Other students work as lecturer, in governmental or non-profit organisations or in clinical settings. The panel values the seven PhD positions available at the BSI graduate school every year. Although there is much competition and only a limited number of PhD positions are available, most graduates find good labour market positions.

The panel is pleased with the increased attention for career opportunities outside academia. Graduates, working as researchers in clinical, industry and/or government organisations share their experiences as a new part of the course 'Professional Skills'. In addition, information about job opportunities after graduating from the programme is shared in the career week in March.

Conclusion

The panel concludes that the students reach a satisfactory level of achievement and graduates are well prepared to find a research position, either working as a PhD student or as a researcher in other organisations. The programme therefore meets standard 4.



3. Strengths and recommendations

3.1 Strengths of the programme

The panel is impressed by the following features:

- Curriculum structure – The programme structure gives students ample opportunity to tailor the programme to their own interests;
- Research orientation – The curriculum pays a lot of attention to research training in the courses and includes two research projects, allowing students to engage actively in different research activities;
- Research community – The programme makes use of small-scale teaching, ensuring a highly interactive learning and tutoring environment with a great deal of attention to the students' individual needs, performance, and development;
- Teaching team – The teaching staff is motivated, well-qualified and knowledgeable in their respective areas. They are active researchers and able to bring in the latest developments in their field.

3.2 Recommendations

For further improvement of the programme, the panel makes the following recommendations:

- Intended learning outcomes – Update the intended learning outcomes to better align with the programme's profile, teaching-learning environment, and professional skills development;
- Applied research – Further strengthen the orientation on applied research outside academia in the curriculum;
- Theme courses – Better communicate the multidisciplinary focus of the programme and the underlying motivation for this approach to the students, and the flexibility in choice of courses;
- Assessment of research project and thesis – Be more transparent with respect to the grading of the major research project and give more weight to the master thesis compared to the research project; re-evaluate the 51 EC for research proposal, research project, and master thesis;
- Cum laude – Re-evaluate the assessment criteria used for cum laude;
- Publications – Develop a publication policy with rules about authorship.



4. Conclusion

The panel concludes that the objectives and intended learning outcomes of the programme meet the standards required for an academic research master's programme. The programme is organised in research-driven courses that offer students good opportunities to tailor the programme to their own interests. The staff of the programme is professional, supportive and very committed. The panel is positive about the assessment system and the variety of assessment methods. Both the quality of the theses and the experiences of the alumni show that the intended learning outcomes are achieved.

Standard	Judgement
Standard 1	Meets the standard
Standard 2	Meets the standard
Standard 3	Meets the standard
Standard 4	Meets the standard
Final conclusion	Positive



Appendix A – Panel composition and programmes of the cluster

Panel composition of the cluster:

- Prof. dr. Janke Cohen-Schotanus (chair) Professor emeritus of Research of Education in the Medical Sciences;
- Prof. dr. Rob Ruiter (chair), Professor of Health and Social Psychology, Faculty of Psychology and Neuroscience at Maastricht University;
- Prof. dr. Lidia Arends, Professor of Statistics and Research Methodology, Department of Psychology, Education & Child Studies at Erasmus University Rotterdam;
- Prof. dr. Caroline Braet, Professor of Developmental Psychopathology, Department of Developmental, Personality and Social Psychology at Ghent University;
- Prof. dr. Rachel Gibson, Professor of Politics, Department of Politics, University of Manchester;
- Prof. dr. Harm Hospers, Professor emeritus of Applied Health Psychology;
- Prof. dr. Detlev Leutner, Professor of Instructional Psychology, Department of Instructional Psychology Faculty of Educational Sciences, University of Duisburg-Essen;
- Prof. dr. Maike Luhmann, Professor of Psychological Methods, Department of psychology, Ruhr University Bochum;
- Hanne Oberman, MSc (student member). Methodology and Statistics for the Behavioural, Biomedical, and Social Sciences, Utrecht University (graduated in 2020);
- Prof. dr. Arne Roets, Professor of Social Psychology, Faculty of psychology and educational sciences, Department of Developmental, Personality, and Social Psychology, Ghent University;
- Prof. dr. Guus Smeets, Professor of Education in Psychology, Erasmus School of Social and Behavioural Sciences at Erasmus University Rotterdam;
- Yvonne Schittenhelm, BSc (student member), Master Individual Differences and Assessment, Tilburg University;
- Marie Stadel, MSc (student member), Behavioural and Social Sciences Research Master, University of Groningen (graduated in 2020);
- Prof. dr. Lieven Verschaffel, Professor of Educational Psychology, Faculty of Psychology and Educational Sciences, KU Leuven;
- Prof. dr. Karine Verschueren, Professor School and Developmental Psychology, Faculty of Psychology and Educational Sciences, KU Leuven.

The cluster is composed of thirteen programmes:

- M Individual Differences and Assessment (research), Tilburg University;
- M Behavioural Science (research), Radboud University;
- M Clinical and Developmental Psychopathology (research), Vrije Universiteit Amsterdam;
- M Social Psychology: Regulation of Social Behaviour (research), Vrije Universiteit Amsterdam;
- M Psychology (research), University of Amsterdam;
- M Communication Science (research), University of Amsterdam;
- M Educational Sciences: Learning in Interaction (research), Utrecht University;



- M Methodology and Statistics for the Behavioural, Biomedical and Social Sciences (research), Utrecht University;
- M Development and Socialisation in Childhood and Adolescence (research), Utrecht University;
- M Social and Health Psychology (research), Utrecht University;
- M Behavioural and Social Sciences (research), University of Groningen;
- M Psychology (research), Leiden University;
- M Developmental Psychopathology in Education and Child Studies (research), Leiden University.



Appendix B – Schedule of the visit

25 March, 2021

Time	Session
08.30 – 10.00	Preparation panel
10.00 – 10.45	Management
10.45 – 11.00	Evaluation
11.00 – 11.45	Students
11.45 – 12.00	Evaluation
12.45 – 13.30	Lecturers
13.30 – 13.45	Evaluation
13.45 – 14.15	Alumni
14.15 – 14.30	Evaluation
14.30 – 15.00	Examination board
15.00 – 15.30	evaluation and preparing questions for management
15.30 -16.00	Second meeting management
16.00 – 17.30	Evaluation
17.30 – 17.45	Presentation of first findings



Appendix C – Documents studied

- Self-evaluation report with appendices;
 - Recommendations from previous accreditation and the follow-up;
 - Adjustments to the RMBS programme due to the Coronavirus;
 - Intended learning outcomes;
 - Overview RMBS curriculum (2019-2020);
 - Inflow and flow figures for the last period considered (2015-2020);
 - Allocated staff 2019-2020;
 - Overview of titles and grades of thesis;
 - Thesis procedure and assessment;
 - Student chapter;
- Selection of fifteen theses with assessment forms;
- Assessment forms of fifteen major research projects;
- Publications of master theses;
- Assessment policy 2015-2016;
- Education and Examination Regulations;
- Course overview;
- Elective courses.



Appendix D – Abbreviations

BSI	Behavioural Science Institute
EB	Examination Board
EER	Education and Examination Regulations
EC	European Credit
FSS	Faculty of Social Sciences
NVAO	Nederlands-Vlaamse Accreditatieorganisatie
RMBS	Research master's programme of Behavioural Science
RU	Radboud University
UTQ	University Teaching Qualification



Appendix E – Overview of the curriculum

Type of course	Year 1				Year 2			
	Block 1	Block 2	Block 3	Block 4	Block 1	Block 2	Block 3	Block 4
Theory	BS: State of the Art (1EC) Theme course 1+2 (8EC)	Theme course 3+4 (8EC)	Theme course 5 (4EC)		Elective Course (4EC)			
Methods & Statistics	Advanced Statistics in R (8EC)		Statistics 3 (4EC) Advanced Methods Course (4EC)	Statistics 4 (4EC) Selective Methods Course (3EC)				
Professional Development	Professional Skills for Researchers (4EC)				Philosophy and Reflection (4EC) Workshops (1EC)			
Research Experience		Minor Research Project (12EC)			Major Research proposal (5EC) Major Research Project (26EC) Major Master Thesis (20EC)			

Courses offered in the RMBS subdivided in four main categories. Students are advised to choose 2 theme courses in block 1; 2 theme courses in block 2; and 1 theme course in block 3.

