

RESEARCH REVIEW

Psychology

2017-2022

## 9. Maastricht University

### 9.1 Organisation, strategy and targets

The Faculty of Psychology and Neuroscience (FPN) is one of six faculties of Maastricht University. FPN focuses on biological, cognitive, and neurocognitive themes in the study of human behaviour. FPN research is organised within five departments: Clinical Psychological Sciences, Cognitive Neurosciences, Methodology & Statistics, Neuropsychology & Psychopharmacology, and Work & Social Psychology. There is a strong experimental neuroscience focus, supported by relevant infrastructure.

In the 2017-22 assessment period FPN had seven strategic aims:

1. To translate fundamental psychological and neuroimaging research into innovative applications for health and wellbeing.
2. To structurally support local and (inter)national collaboration, in order to optimise the use of FPN's research infrastructure.
3. To continue exploring new research methodology in the fast-growing field of empirical brain and cognition research.
4. To establish internal mechanisms for supporting researchers working on topics which are less likely to acquire external funding.
5. To intensify the impact of psychological expertise and knowledge in the domain of preventive psychology, clinical psychology, and forensic psychology.
6. To solidify international partnerships in the form of double/joint doctoral degrees.
7. To promote sustainable embedding of responsible research practices into the faculty.

### 9.2 Research quality

In the self-evaluation report, FPN argues that it has successfully achieved each of the seven strategic aims described above. For example, achievement of the 'translation' aim (point 1) is illustrated by reference to the development of brain-based treatment approaches for psychiatric and neurological disorders and by the Gravitation grant 'New Sciences of Mental Disorders'; achievement of the 'new research methodologies' aim (point 3) is illustrated by the use of VR techniques to treat obesity; achievement of the 'internal funding' aim (point 4) is illustrated by the use of the 'Robin Hood' fund to give early-career researchers the opportunity to supervise PhD students; and achievement of the 'research integrity' aim (point 7) is illustrated by the development of standardised practices concerning research data. Two aims concern internationalisation: It is shown that 50% of the research output in the 2017-22 period involved international collaborations (point 2), and that the number of joint degrees involving international partners increased from 11 (previous assessment period) to 31 (current period) (point 6).

In addition to the strategic aims, the self-evaluation report highlights FPN's heightened focus on 'putting science into practice' which is also reflected in the increasing diversification of FPN's external funding profile. Emerging evidence for this shift in focus can be found in a relative increase of income derived from applied health programmes compared to, for example, personal grants over the assessment period, which was marked in part by significant COVID-related challenges for psychological research. It will be interesting to further monitor this development over the next several years.

The unit's research profile is focused on theory-driven research and on the translation of psychological knowledge into applications that benefit health and wellbeing. With its strong profile in biological psychology and cognitive neuroscience, the unit is well-equipped to achieve this translation.



Examination of indices of the quality of its research output must bear this ‘applied’ focus in mind, because papers reporting applied research tend to attract fewer citations. While there is no doubt that some of the unit’s publications are of impressive quality, with high citation scores, FPN’s self-evaluation report shows that only about half of the unit’s total publications are cited more than expected, given document type, field, and year of publication. However, the joint self-evaluation report, using a different index of citation impact, paints a somewhat more favourable picture, despite not listing UM among the top places in terms of citations.

### 9.3 Societal relevance

FPN has the explicit ambition to conduct societally relevant research. Indeed, the first of the seven strategic aims concerns the translation of FPN research into innovative applications for health and wellbeing. FPN has strengthened its collaborations with mental health care, rehabilitation, and public health organisations in several areas of application (e.g., HIV prevention, mental health care, care for people with acquired brain injury, child protection services, inclusive labour market), in part through structural partnerships and in part on an individual project basis (e.g., through grants from applied health organisations). The Committee concludes that FPN performs well on measures of societal impact. The self-evaluation report contains numerous examples of ways in which FPN research has had an impact beyond academic settings and the joint self-evaluation report also shows that FPN research has had numerous mentions in the news and in policy documents, most notably in clinical psychology.

### 9.4 Viability

The self-evaluation report argues that FPN is in a much stronger financial position than it was in the early years of the assessment period. The figures shown in the self-evaluation report show a consistent excess of income over expenditure as far as research activity is concerned. Nevertheless, a notable financial challenge faced by FPN is the high cost of its neuroimaging research resulting from the need to maintain scanners and to make plans for their replacement. FPN is aware of this issue and has plans to address it, but this puts the unit under considerable pressure to attract external research funding to enable it to run and maintain its neuroimaging facilities. Justifiable frustration was expressed about the fact that neuroimaging research is funded on a social science rather than natural science basis, despite the evident fact that neuroimaging research depends on critical infrastructure in the same way that many natural sciences do.

Another challenge identified in FPN’s SWOT analysis is the forthcoming retirement of several senior professors and the need to replenish the research groups concerned through the appointment of new staff. Again, FPN is aware of this and is engaged in a succession planning process.

FPN’s future research plans include a greater emphasis on basic research and on team science, along with plans to invest in research that aligns with the Sector Plan SSH. The unit is well placed to contribute to the mental health theme and is actively recruiting and investing to address the two other themes (stereotyping and exclusion; spreading of misinformation and disinformation through social media).

### 9.5 PhD policy and programme

All FPN PhD candidates are members of the FPN Graduate School. PhD candidates design their own training programme, but must follow courses on open science, research ethics, and science communication. They formalise their training in their Training and Supervision Plan, which is flexibly adjusted over time. A potential downside of this freeform approach is the dependence on initiative from



the PhD candidate and/or supervisory team for establishing expectations about research activities and output. The Committee advises that PhD candidates' ideas about what is expected should be actively managed and the intended research outcomes subsequently formalised. The onboarding process and annual progress meetings offer suitable opportunities.

The PhD candidates informed the Committee that there are differences between employed PhD candidates and those on other types of contracts. For example, the PhD candidates indicated that employed PhD candidates receive a conference travel budget, but PhD candidates with other types of contracts do not receive such a budget. The interviewed PhD candidates suggested that FPN should be more upfront about such differences, particularly concerning budgets and teaching responsibilities. The Committee advises FPN to ensure that distinctions between employed and non-employed PhD candidates do not adversely affect opportunities and (as a result) outcomes.

FPN's SWOT analysis mentions problems with social safety and inclusivity as a threat. PhD candidates are aware that social safety is an ongoing issue, but acknowledge the improved procedures, such as the mentoring program. They suggested that access to a confidential advisor who is not directly related to FPN should be created.

## 9.6 Open science

There is a clear commitment to make the unit's publications open access as evidenced by a rising trend in open access publications over the assessment period. Additionally, there is a commitment to make greater use of pre-registration and to produce data that abide by FAIR principles. In FPN's SWOT analysis, there is mention of the bureaucratic requirements related to research data management, privacy, research ethics and Open Science, and the need to reduce this burden, which suggests that there is still some distance to travel in this respect. Discussion with senior staff revealed that concerns about privacy place constraints on data sharing, and here there does seem to be genuine scope for less bureaucracy and greater streamlining. Discussion with PhD candidates showed that they are well informed about open science policy and practice and regard it as a normal way to do research. They observed differences in the perceptions of management and senior staff, resulting in differences in the integration of open science practices into daily research practice between research groups. The Committee advises that these issues should be ironed out as far as possible. The faculty's forthcoming Open Science Action Plan, which will focus on improving the flow of information and streamlining procedures, should help in this regard.

## 9.7 Working environment and personnel policies

### 9.7.1 Academic Culture

Discussion with staff at all levels showed that the academic culture at FPN is characterised by openness and inclusivity. Considerable emphasis is placed on team science, which helps to promote collaboration and inclusion. Senior staff recognise the importance of good, transparent communication with junior colleagues and of managing expectations concerning career progression.

Regarding research integrity, starting in 2023 all new FPN staff attend an onboarding session in which general issues and procedures regarding security, ethics, privacy, and data management are explained, including information on whom to contact with questions on these topics and where to find additional information. This is a welcome development, although it could be seen as having started rather late.



### 9.7.2 Human Resources Policy

FPN does relatively well with respect to gender diversity. The percentage of female full professors increased from 35% to 44% during the assessment period. There is also diversity with respect to internationalisation, with around 50% of staff (including PhDs) being international, and more than half of the international PhD candidates coming from 'non-EU' countries. Discussion with some of these PhD candidates showed that they felt welcome and included. It is noteworthy that FPN offers intercultural sensitivity training for supervisors and PhD candidates.

The Recognition & Rewards programme is welcomed by early-career researchers but there is some concern that the 'old' criteria for promotion might nevertheless apply within some units, despite the new model.

## 9.8 Conclusions and recommendations

### 9.8.1 Conclusion

FPN provides an open research environment that values diversity and inclusion. There is a broad spectrum of FPN research, ranging from fundamental work to applied work, and the unit's own citation analysis reflects this variation, with around half of the outputs attracting above average citations, given the type of publication, research field, and year of publication, including some papers that are outstanding in this respect. The fact that the remaining publications attract below average citations reflects (at least in part) the applied nature of some of the research portfolio. FPN research does correspondingly well with respect to societal relevance, especially in areas such as mental health. FPN's research plans include an emphasis on fundamental research and team science, and closer alignment with the Sector Plan SSH. The current financial position is healthy but there is uncertainty about the future financing of neuroimaging research.

### 9.8.2 Recommendations

The Committee makes the following recommendations for further improvements in the coming years:

- To promote open science, direct efforts towards addressing the legal issues that make it difficult to share data openly.
- The university should provide appropriate funding for the critical infrastructure needed for neuroimaging research. As noted above, the FPN research portfolio includes work that is closer to physical, medical, and biological science than to social science, with an associated increase in costs. The fact that FPN research is funded on a social-science basis places an unwelcome strain on resources.
- Ensure that all team leaders fully embrace the new Recognition & Rewards system.
- Ensure, as far as is practically possible, equality of research resourcing for employed (AiO) and non-employed (e.g., scholarship) PhD candidates.

