

# RESEARCH REVIEW

Psychology

2017-2022

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# Contents

<b>PREFACE .....</b>	<b>6</b>
<b>1. INTRODUCTION .....</b>	<b>7</b>
1.1 TERMS OF REFERENCE FOR THE ASSESSMENT .....	7
1.2 THE REVIEW COMMITTEE .....	7
1.3 PROCEDURES FOLLOWED BY THE COMMITTEE .....	8
<b>2. GENERAL REMARKS.....</b>	<b>9</b>
<b>3. VRIJE UNIVERSITEIT AMSTERDAM.....</b>	<b>18</b>
3.1 ORGANISATION, STRATEGY AND TARGETS.....	18
3.2 RESEARCH QUALITY .....	18
3.3 SOCIETAL RELEVANCE .....	19
3.4 VIABILITY .....	19
3.5 PHD POLICY AND PROGRAMME.....	20
3.6 OPEN SCIENCE .....	21
3.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	21
3.7.1 <i>Academic Culture</i> .....	21
3.7.2 <i>Human Resources Policy</i> .....	22
3.8 CONCLUSIONS AND RECOMMENDATIONS .....	22
3.8.1 <i>Conclusion</i> .....	22
3.8.2 <i>Recommendations:</i> .....	22
<b>4. UNIVERSITY OF AMSTERDAM .....</b>	<b>24</b>
4.1 ORGANISATION, STRATEGY AND TARGETS.....	24
4.2 RESEARCH QUALITY .....	24
4.3 SOCIETAL RELEVANCE .....	25
4.4 VIABILITY .....	25
4.5 PHD POLICY AND PROGRAMME.....	26
4.6 OPEN SCIENCE .....	26
4.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	27
4.7.1 <i>Academic Culture</i> .....	27
4.7.2 <i>Human Resources Policy</i> .....	27
4.8 CONCLUSIONS AND RECOMMENDATIONS .....	27
4.8.1 <i>Conclusion</i> .....	27
4.8.2 <i>Recommendations</i> .....	28
<b>5. OPEN UNIVERSITEIT.....</b>	<b>29</b>
5.1 ORGANISATION, STRATEGY AND TARGETS.....	29
5.2 RESEARCH QUALITY .....	29
5.3 SOCIETAL RELEVANCE .....	30
5.4 VIABILITY .....	30
5.5 PHD POLICY AND PROGRAMME.....	30
5.6 OPEN SCIENCE .....	31
5.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	31
5.7.1 <i>Academic Culture</i> .....	31



5.7.2 <i>Human Resources Policy</i> .....	32
5.8 CONCLUSIONS AND RECOMMENDATIONS .....	32
5.8.1 <i>Conclusion</i> .....	32
5.8.2 <i>Recommendations</i> .....	32
<b>6. UTRECHT UNIVERSITY.....</b>	<b>34</b>
6.1 ORGANISATION, STRATEGY AND TARGETS.....	34
6.2 RESEARCH QUALITY .....	35
6.3 SOCIETAL RELEVANCE .....	35
6.4 VIABILITY .....	35
6.5 PHD POLICY AND PROGRAMME.....	36
6.6 OPEN SCIENCE .....	36
6.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	37
6.7.1 <i>Academic Culture</i> .....	37
6.7.2 <i>Human Resources Policy</i> .....	37
6.8 CONCLUSIONS AND RECOMMENDATIONS .....	37
6.8.1 <i>Conclusion</i> .....	37
6.8.2 <i>Recommendations</i> .....	37
<b>7. UNIVERSITY OF GRONINGEN.....</b>	<b>39</b>
7.1 ORGANISATION, STRATEGY AND TARGETS.....	39
7.2 RESEARCH QUALITY .....	39
7.3 SOCIETAL RELEVANCE .....	40
7.4 VIABILITY .....	40
7.5 PHD POLICY AND PROGRAMME.....	41
7.6 OPEN SCIENCE .....	42
7.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	43
7.7.1 <i>Academic Culture</i> .....	43
7.7.2 <i>Human Resources Policy</i> .....	43
7.8 CONCLUSIONS AND RECOMMENDATIONS .....	43
7.8.1 <i>Conclusion</i> .....	43
7.8.2 <i>Recommendations</i> .....	44
<b>8. LEIDEN UNIVERSITY .....</b>	<b>45</b>
8.1 ORGANISATION, STRATEGY AND TARGETS.....	45
8.2 RESEARCH QUALITY .....	45
8.3 SOCIETAL RELEVANCE .....	46
8.4 VIABILITY .....	46
8.5 PHD STUDENT POLICY AND PROGRAMME .....	47
8.6 OPEN SCIENCE .....	48
8.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	48
8.7.1 <i>Academic Culture</i> .....	48
8.7.2 <i>Human Resources Policy</i> .....	48
8.8 CONCLUSIONS AND RECOMMENDATIONS .....	49
8.8.1 <i>Conclusion</i> .....	49
8.8.2 <i>Recommendations</i> .....	49
<b>9. MAASTRICHT UNIVERSITY .....</b>	<b>51</b>
9.1 ORGANISATION, STRATEGY AND TARGETS.....	51



9.2 RESEARCH QUALITY .....	51
9.3 SOCIETAL RELEVANCE .....	52
9.4 VIABILITY .....	52
9.5 PHD POLICY AND PROGRAMME.....	52
9.6 OPEN SCIENCE .....	53
9.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	53
9.7.1 <i>Academic Culture</i> .....	53
9.7.2 <i>Human Resources Policy</i> .....	54
9.8 CONCLUSIONS AND RECOMMENDATIONS .....	54
9.8.1 <i>Conclusion</i> .....	54
9.8.2 <i>Recommendations:</i> .....	54
<b>10. ERASMUS UNIVERSITY ROTTERDAM.....</b>	<b>55</b>
10.1 ORGANISATION, STRATEGY AND TARGETS.....	55
10.2 RESEARCH QUALITY .....	55
10.3 SOCIETAL RELEVANCE .....	55
10.4 VIABILITY .....	56
10.5 PHD POLICY AND PROGRAMME.....	57
10.6 OPEN SCIENCE .....	58
10.7 WORKING ENVIRONMENT AND PERSONNEL POLICIES .....	58
10.7.1 <i>Academic Culture</i> .....	58
10.7.2 <i>Human Resources Policy</i> .....	58
10.8 CONCLUSIONS AND RECOMMENDATIONS.....	59
10.8.1 <i>Conclusion</i> .....	59
10.8.2 <i>Recommendations</i> .....	59
<b>APPENDIX A - PROGRAMME OF THE SITE VISIT .....</b>	<b>60</b>
<b>APPENDIX B- QUANTITATIVE DATA.....</b>	<b>63</b>



## Preface

Like several other disciplines, psychology developed as a science in the nineteenth century, especially the second half, and became a full empirical science in the first half of the twentieth century. In the Netherlands, Gerard Heymans, a philosopher at the University of Groningen around 1900, strongly interested in psychology and oriented towards knowledge development based on empirical research, is considered the founding father of Dutch scientific psychology. After a modest start, in the post-World War II years, psychology as initiated by Heymans and taken up by others gained momentum and was first established as an independent academic discipline in the early 1960s. While initially oriented at developing education for future psychologists active mostly in clinical and work and organisational settings, soon larger-scale research followed and by the end of the 1980s, the focus was directed at international research psychology. Looking back, it is fascinating how determined and unanimous Dutch psychologists of all universities took the turn to the international arena. Since then, Dutch academic research has taken giant steps forward and accomplished its goal arriving among the top players of international psychological research.

The Review Committee for psychological research 2017—2022 readily concluded that nowadays the research quality of Dutch psychological research is among the best psychology has to offer internationally. It could therefore focus on the other two assessment criteria the Strategy Evaluation Protocol defines, which are Societal Relevance and Viability. In addition, the Strategy Evaluation Protocol requires assessments of four auxiliary criteria, which are Open Science, PhD Policy and Training, Academic Culture, and Human Resources Policy. This report discusses the Committee's assessment of these criteria for each of the eight psychology research programmes participating in the research review but refrains from a mutual comparison and ranking of the programmes, as stipulated in the terms of reference the Committee received. The Committee also discusses the joint self-evaluation the eight programmes made available. The Committee notices that Dutch psychology is going through a period of massive transition in many areas that present interesting challenges but also can pose threats if not monitored with precision, care, and caution. To support Dutch psychological research and the various individual research groups critically, each chapter is concluded with a list of recommendations.

The Committee experienced the discussions with the four delegations of each of the eight research programmes—management, senior staff, early-career staff, and PhD candidates—as useful and pleasant, and appreciated the atmosphere of candidness and constructiveness aimed at further improving Dutch psychological research. The absence of a defensive attitude sometimes encountered in review procedures, here contributed to an open atmosphere in which several delegations chose to discuss their issues and worries with the Committee. The Committee wishes to emphasise that it considers this attitude essential for a useful research review and thanks all participants for making this possible.

Klaas Sijtsma, Chair of the Evaluation Committee



# 1. Introduction

## 1.1 Terms of reference for the assessment

The quality assessment of research in Psychology is carried out following the Strategy Evaluation Protocol for Public Research Organisations published by the Universities of the Netherlands (UNL), the Netherlands Organisation for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW).

The Committee was asked to assess the scientific quality, the relevance and utility to society, and the viability of the research conducted by research institutes of eight universities in the reference period 2017-2022, as well as the strategic targets the research institutes defined and the extent to which the institutes are equipped to achieve these targets.

The current assessment addresses the research domain psychology and spans eight of the twelve general universities in The Netherlands mentioned here in the order in which the Review Committee interviewed them:

- Vrije Universiteit Amsterdam (VU)
- University of Amsterdam (UvA)
- Open Universiteit (OU)
- Utrecht University (UU)
- University of Groningen (RUG)
- Leiden University (UL)
- Maastricht University (UM)
- Erasmus University Rotterdam (EUR)

Accordingly, three main criteria are considered in the assessment: research quality, relevance to society, and viability. During the evaluation of these criteria, the Committee was asked to incorporate four specific aspects: Open science, PhD policy and training, academic culture, and human resources policy.

This report describes the findings, conclusions, and recommendations of this external assessment of the research in Psychology.

## 1.2 The Review Committee

The Board of the participating universities appointed the following members of the Committee for the research review:

- Em. prof. dr. Klaas Sijtsma – Tilburg University, Netherlands (chair)
- Em. prof. dr. Antony Manstead – Cardiff University, Wales
- Prof. dr. Johan Wagemans – KU Leuven, Belgium
- Prof. dr. Terrie Moffitt – Duke University, Durham, North Carolina, USA
- Prof. dr. Áine Kelly – Trinity College Dublin, Ireland
- Prof. dr. Ulrich Ebner-Priemer – Karlsruhe Institute for Technology, Germany
- Charlotte M. de Blecourt MSc – Radboud Universiteit Nijmegen, The Netherlands (PhD member)

The Board of the participating universities appointed dr. Annemarie Venemans and drs. Esther Poort of De Onderzoekerij as the Committee secretaries. All members of the Committee signed a declaration and disclosure form to ensure that the Committee members made their judgements without bias, personal



preference, or personal interest, and that the judgment was made without undue influence from the institutes or stakeholders.

### **1.3 Procedures followed by the Committee**

The Committee proceeded according to the Strategy Evaluation Protocol (SEP) 2021- 2027. The assessment was based on the documentation provided by the eight research programmes and the interviews with four groups of representatives from each programme: the programme’s management, selections of senior researchers, selections of junior researchers, and PhD candidate representatives. The interviews took place from October 9 until October 13, 2023 (see Appendix A).

Prior to the site visit, the Committee reviewed detailed documentation comprising the self-evaluation reports of the eight research programmes including appendices. A distinct document, which was presented to the Committee, is titled ‘Psychology Joint Self-Evaluation 2017-2022.’ In this document, the eight participating universities present an overarching quality and impact analysis of the research foci including their societal impact and how they jointly contribute to the international positioning of Dutch psychology research. The aim is to identify collaborative and synergistic research across the participating research units but also collaborations with other universities, both within and beyond the Netherlands. Additionally, this document encompasses a benchmark study that identifies eight main research areas (also called concepts) in the field of psychology from seven Western countries, providing a basis for comparison with Dutch psychological research.

The Committee discussed its assessment of each research programme during several sessions of the site visit. The Committee chair had a coordinating role in the writing procedure and delegated the writing of sections to members of the Committee. The members of the Committee commented by email on the draft report. The draft version was then presented to the research programmes for factual corrections and comments. Subsequently, the text was finalised and presented to the Executive Boards of the eight universities.





## 2. General remarks

### Introduction

The Committee's main conclusion is that Dutch academic psychological research is in excellent shape, excelling in both overall research quality and the societal significance of its findings. This upward trajectory in research quality has been ongoing for over three decades, commencing in the late 1980s and early 1990s when Dutch psychological research began presenting itself more prominently on the international stage than in the decades prior to the 1990s. Currently, Dutch research in psychology attains an international standard and is on par with or even surpassing the quality found in the top-performing nations. Given the high quality and the evident societal relevance of this research, the future of psychological research in the Netherlands appears to be bright.

Evaluating the sustainability of Dutch psychological research requires considering not just the past six years but also the context of various external influences and self-imposed transitions. Within this report, the Committee offers recommendations on how to navigate potential challenges that may arise. Recommendations are summarised at the end of each chapter, but the reader may sometimes encounter specific recommendations or advice throughout the text, especially in this chapter.

In the following section, the Committee delves into the findings of the document titled 'Psychology Joint Self-Evaluation 2017-2022' and the ongoing transitions in Dutch psychological research during these years. It identifies areas that require significant attention to ensure a consistent research trajectory aligned with the selected policy. The Committee emphasises that it does not intend to express an opinion on the specific policy choices, as they view these as the responsibility of the programmes themselves. However, the Committee believes that its role is to pinpoint potential strengths and weaknesses and offer recommendations that it hopes will benefit the programmes leading up to the next assessment, likely in 2029.

### Psychology Joint Self-Evaluation 2017-2022

In their collaborative report titled 'Psychology Joint Self-Evaluation 2017-2022', the eight programmes use quantitative markers to concisely review the disseminated output against an international benchmark. Using quantitative evidence, the programmes provide a joint self-evaluation that particularly highlights their collaborative achievements, in addition to the narrative information in accordance with the Strategy Evaluation Protocol (SEP) 2021-2027. They view this joint endeavour as of utmost importance due to its connection to the Sector Plan SSH, a policy report published in 2023 concerning the social and behavioural sciences as well as the humanities and published on their initiative, which outlines a broad mission of maximising the utilisation of the diverse research units in the Netherlands through interdisciplinary collaboration that transcends specialised fields and disciplines. Moreover, the programmes regard the present evaluation as an excellent opportunity to pinpoint future aims that are shared on a national level.

The adopted bibliometric approach combined local current research information systems (CRISs) with two data sources. These sources are OpenAlex, an open-source and open-access data base of scholarly works and metadata enabling the calculation of academic publication counts and performance metrics, and Altmetric, a commercial database that tracks mentions of scholarly works in non-academic sources, allowing an assessment of societal impact.



The research team conducting the bibliometric analysis opted for the concept-weighted citation score (CWCS) based on raw citation counts that allows for comparison of performance within fields of research and between years of publication. For instance, a publication with a CWCS of 1.25 received 25% more citations than the average publication within the same concept (e.g., clinical psychology) and publication year. Societal impact was quantified by simple counts of the mentions of academic works in the different media outlets and policy documents as produced by Altmetric.

The Committee's assessment, based on these findings, confirms that Dutch psychology research has continued to uphold its very strong reputation in the assessment period.

Between 2017 and 2021, the programmes collectively published more than 13,000 academic works. The fields of clinical psychology, social psychology, cognitive psychology (including cognitive science), and developmental psychology demonstrated the highest levels of productivity. Research production slightly increased over the assessment period, especially for clinical psychology and social psychology.

The exceptionally high quality of the research of the eight participating programmes is also clear from the CWCS, which provides valuable insights into the quality and impact of these publications, complementing the raw publication counts. Across the assessment period, the mean CWCS across all eight programmes was 3.30 and the median was 3.06, with the smallest CWCS at programme level equal to 1.59 and the largest equal to 5.86. Collaborations between programmes and international partners/researchers were cited more frequently compared to collaborations between national programmes or publications from authors affiliated with the same programme. Within the Netherlands, geographical proximity appeared to influence collaborations between different programmes, although exceptions existed. For example, the UU and the RUG, despite their relatively large distance from each other, work together in several concept areas. International benchmarking shows the CWCS of the Netherlands ranked highly when compared to CWCS values in Belgium, Switzerland, Germany, Denmark, Great Britain, Sweden, and the United States.

Of special interest to the Committee were the results with respect to the five research themes of the Sector Plan SSH. The themes are 'youth resilience', 'mental disorders', 'the human factor in new technologies', 'social transition and behavioural change', and 'social inequality and diversity'. The Sector Plan SSH aims to unite researchers from various programmes to avoid fragmentation and redundancy of research, thereby facilitating improved coordination of (future) research lines. Each programme selected three SSH themes that aligned with its unique profile and future objectives. The report details the alignment of research activities during the 2017-2021 period with the three SSH themes chosen by each programme. The document warns that the findings concern past contributions (2017-2021), whereas the SSH themes were established more recently, so perfect alignment between the past and present research and the intended research themes may not be guaranteed.

The document concludes that inserting the (normalised) publication counts in a table based on three themes chosen by each programme does not reveal a pattern consistent with the envisioned future direction. In fact, the document states that the 'mere counting of works does not yet agree with the strategically chosen future foci outlined in the Sector Plan SSH.' Mental disorders had the largest output share, while 'the human factor in new technologies' and 'social inequality and diversity' were underrepresented. The Committee noticed that the Sector Plan SSH and its appendices do not specify precise Key Performance Indicators for evaluating success in addressing the three SSH themes within each programme. It recommends that the research programmes define Key Performance Indicators to quantitatively monitor the progress made in aligning their research focus with the three themes they chose and assess whether sufficient progress has been achieved. Furthermore, the Committee recommends that the programmes should also monitor the factors that facilitate or hamper such an alignment.



### **Open Science, Research Integrity**

The interviews clarified that the various faculties seem to have more rules and regulations, programmes, courses (primarily for PhD candidates and research master students), Committees (ethical, sometimes audits), and facilities (such as data stewards) in place than what was originally conveyed in the self-studies. The Committee found this information reassuring.

With respect to the preregistration of research plans, data storage facilities, and data publication, faculties claimed that these activities had already been broadly accepted and implemented. The Committee appreciates the growing attention to these topics, with a notable leadership role played by younger researchers. However, the Committee did not obtain a clear picture of the percentages of studies and researchers for which the various areas of open science, such as preregistration and data publication, were realised. Many of the open science activities are voluntary, and programmes differ in the level of support researchers receive (e.g., data stewards) and the legal hurdles they experience regarding sharing of datasets (e.g., privacy regulations, and legal guidance from the universities' legal departments). The Committee recommends monitoring progress in all areas. For instance, tracking the percentage of studies that are preregistered, the percentage of researchers engaged in preregistration, the percentage of data sets stored in accordance with regulations, and the percentage of data sets and code made publicly available. Results should preferably be published annually and made available on the programme websites.

The Committee observed that several researchers face challenges arising from the conflicting requirements between (a) the principles of open science and easy access to shared data, and (b) privacy legislation aimed at safeguarding the personal data of research participants. Researchers are confronted with the dual responsibility of demonstrating their commitment to transparently sharing participants' data while also ensuring the rigorous protection of participants' privacy. This ongoing dilemma can pose a significant challenge for researchers. The Committee recommends management to pay attention to this issue.

### **HR Policy**

#### ***Recognition & Rewards***

In 2019, a coalition of all 14 Dutch universities launched the Recognition & Rewards programme. This programme was a response to the tenure and promotion policies that were predominantly based on an employee's research output (such as the number of articles, citation index, and success in grant applications) as practised by universities in the preceding period. The Recognition & Rewards programme explicitly included teaching achievements and management contributions as criteria for tenure and promotion decisions. It also suggested tailoring work profiles to accommodate the specific needs of each assistant, associate, and full professor, recognising that these roles may involve different proportions of educational, administrative, and research responsibilities. Each university is currently in the process of implementing the programme in its own way, and within universities, faculties may vary in their approaches to implementation.

The Committee has established that the psychology programmes have accepted the Recognition & Rewards programme, and, in several cases, it seems fair to say the programme is embraced at all levels of personnel. In their interviews, however, the Committee has noticed different interpretations of the Recognition & Rewards programme, both in its meaning and its possibilities, with the most distinct differences arising between management and senior staff on one hand and early-career staff on the other hand. The Committee also noticed varying interpretations and expectations between early-career staff representatives of different programmes. Younger staff often holds high expectations of the



Recognition & Rewards programme for promotion opportunities to associate and full professor. Some younger staff even perceived that most, if not all, can achieve such promotions, and not being promoted is seen as a failure in a scientific career. The Committee occasionally sensed that the focus on these aspects, while significant in a career, might overshadow job satisfaction or at least play a role that appears overly dominant.

In contrast, other early-career staff seemed quite realistic about the pyramid-like job-structure model that most faculties in The Netherlands adopt and some realised that their opportunities for promotion eventually might reside in other universities or even in other (research) organisations.

Given the combination of the enthusiasm with which the Recognition & Rewards programme has been met in all faculties as well as the great importance that especially early-career staff attaches to the programme and the job opportunities they perceive, the Committee recommends the leadership of all eight faculties to establish an expectation management programme and monitor its progress on a regular basis. Being explicit about opportunities or lack thereof, about performance expectations, and about the need to accept some levels of uncertainty about career development, seems to be of the utmost importance.

Another feature of the Recognition & Rewards programme is the emphasis it places on team science. One reason for this emphasis is the expected greater output and impact of research when teams of researchers combine their efforts to produce results within larger projects. Another reason seems to be the wish to mitigate the competition between researchers in the same faculty that can negatively affect the academic climate. The Committee has observed that some researchers are uncertain about whether they can still pursue research in smaller groups or independently without negative implications for their career progression. Therefore, the Committee recommends that the various programmes explicitly clarify the options available for researchers who prefer to work in smaller groups or individually.

### ***Diversity, Social Safety, Workload***

The Committee noticed that in general, programmes and the faculties to which they belong assign great value to diversity, with a particular emphasis on gender diversity. While gender diversity is obvious in the PhD programmes and the assistant professors, for the higher ranks, equal representation of males and females is often not realised although progress is visible. During interviews, some management representatives mentioned the challenge of relatively slow staff turnover, which can impede progress, especially when the number of full professors and possibly associate professors is fixed, and development relies on the retirement of older personnel. With some exceptions, the Committee noticed that diversity criteria other than gender were often not put into place yet, but this also depended on the composition of the population in some areas. The interview duration was insufficient to discuss in more detail with management how the selection criteria for personnel selection were chosen and how selection procedures were designed and implemented. From personnel and selection psychology it is known that a tension exists between favouring certain subgroups and favouring individual talent. The Committee recommends being transparent about the principles on which the personnel selection policy is based.

Programmes devote attention to creating a safe environment for their employees, for example, by encouraging equal positions in scientific discussions without hierarchical barriers. All PhD programmes have implemented initiatives to reduce the dependency on a single promotor. For example, many early-career staff are part of a PhD's supervision team. The interviewed PhD candidates welcomed external support to their well-being, such as independent PhD advisors. Greater diversity in the staff composition can also create a greater sense of equality among staff mutually and between staff and students. The



Sector Plan SSH has enabled universities to hire more personnel in tenured positions, thereby reducing the high workload that had been a problem at Dutch universities, especially in the social and behavioural sciences and the humanities, for some time.

### **Societally Relevant Research**

The Committee noted that every research programme performs well in outreach activities and presents many examples of research collaborations having significant societal relevance. All programmes emphasise in their mission and strategy statements the importance of research that has direct relevance for society and thus focuses on the application of theoretical insights to issues that citizens and organisations are concerned about or on a more direct approach of such issues. The self-studies, however, exhibit variation in the extent to which they aim to strike a balance between fundamental and socially relevant research, as well as how they address this balance. Some programme representatives let the Committee know that they consider fundamental research to be key. They stressed the importance that non-academics may not always understand that the road from theory to application may be long and paved with hurdles, and that academics must be clear about the difficulties to be expected. Representatives of other programmes were concerned whether they had enough room to do fundamental research without obvious, direct application and whether their choices would hamper their career opportunities. Nevertheless, the general focus seems to be on societally relevant research, and the Committee noticed that a one-sided preference for fundamental research was rare at the programme level.

The Committee noticed that the focus on societally relevant research is the result not only of intrinsic motivation but also of persistent requests, and at times, pressures exerted by Dutch politics, the public, and the media on Dutch science, particularly in the field of psychological research, over the past decades. The COVID-19 pandemic may also have influenced or amplified these developments.

In the Sector Plan SSH, each of the programmes identified three out of five key application areas. The joint Self-Evaluation 2017-2022 showed that, based on the research in the 2017-2021 period, the application foci the programmes realised in the assessment period either do not coincide or coincide only partly with the three foci they identified each when setting up the Sector Plan SSH.

As mentioned above, the Committee noticed that the Sector Plan SSH lacks Key Performance Indicators that explicitly measure the extent to which the chosen application profiles have been realised by each programme. The interviews did not reveal that the various programmes were concerned about the discrepancy between the recent-past profile and the profile-to-be-realised in the upcoming assessment period. When asked, they answered mostly that it would take time to make the transition with respect to the chosen profile and accompanying research content.

Based on their analysis, the Committee recommends the programmes to clarify in their institutions the relation between fundamental and applied research, and the possibility for researchers and programmes to engage in fundamental research even when it does not produce directly applicable results. The Committee also advises establishing a monitoring mechanism to track the contributions of research toward achieving and enhancing the selected programme profile. This systematic approach will enable programmes to effectively shift their focus toward applications and respond comprehensively to inquiries from non-academic stakeholders about the progress in realising the chosen profiles.



### Financing Psychological Research

An increasing proportion of psychological research requires specialised instruments, such as MRI scanners, eye-trackers, and brain potential apparatus, as well as facilities meeting unique requirements, such as vibration-free building construction and soundproof cabins for psychophysiological measurements. Additionally, expert personnel are essential for conducting experiments, performing measurements, software programming, and equipment maintenance. For some programmes, their universities allocate some extra (but nevertheless insufficient) financial means, but other universities do not allocate any additional funding. Consequently, these programmes must seek alternative means of financing these facilities. In some instances, access to expensive scanners situated in university hospitals is facilitated, although researchers' access to these resources is often given low priority due to hospital needs, including patient care. The associated costs of utilising such equipment remain a financial challenge for psychology programmes. While the Committee understood that a national scanning facility is set to be established in Nijmegen, it is unlikely that this will alleviate the existing financial and logistical difficulties.

The Committee has noticed that the finances that go with the instrumentation of psychological research place an increasing burden on programme budgets that lack the financial advantages the natural sciences enjoy in comparable situations. The Committee has also noticed that the financial problems present a threat to the position of significant sectors of Dutch psychological research viewed in an international context when similar research receives better funding in other countries. The Committee agrees that the argument for improving the basic funding of psychology to align with that of the natural sciences is plausible, considering the expenses associated with lab-based experiments and other costly investigations. The Committee recommends the Executive Boards of the universities involved to consider aligning the funding for instrumentation, which includes facilities and specialised personnel, with the standards typically established for the natural sciences.

In addition to the cost of neuroimaging facilities and the need for specialised staff for experimental and computational work, some types of developmental and clinical psychology studies involve significant financial investments. This includes the cost (especially in terms of time and effort) of, for example, seeing individual patients, conducting in-depth interviews requiring qualitative analyses, testing children and adolescents from different age cohorts in longitudinal designs, etc. All these labour-intensive research activities differentiate psychology from research in the humanities and social sciences.

### PhD Programmes

The Committee noticed that the international success of Dutch psychological research derives in large part from the extensive PhD programmes each of the faculties involved entertains. Many, if not all, programmes secure funding for PhD researchers and their research through external grants obtained from organisations such as the Netherlands Organisation for Scientific Research (NWO) and ZonMW, the European Research Council (ERC), as well as various other sources, including healthcare institutions, governmental organisations, and commercial organisations, including industries and the military.

It is important to distinguish among different categories of PhD candidates. The largest group comprises PhDs who are formally employed by the university. They receive a monthly salary and engage in research related to specific projects or programmes and engage in some teaching. Their employment contracts often include benefits like paid leave and access to university facilities. The second group consists of PhD candidates who secure scholarships or fellowships that cover their tuition fees and provide a stipend for living expenses. Examples include candidates with scholarships from the Indonesian or Chinese governments. Generally, they receive lower compensation than the first group.



The third category encompasses self-funded PhD candidates. They often work more independently and typically lack formal employment contracts with the university. The financial situations of external PhD candidates can vary widely.

The Committee noted that the experiences of PhD candidates can vary based on their funding source, employment status, and the specific regulations of the university or research institution where they pursue their PhD trajectory. The Committee noted some dissatisfaction among PhD candidates funded by scholarships regarding their unequal access to support for attending courses and conferences.

The PhD representatives the Committee interviewed were in general satisfied with their position as PhD researcher, including the supervision they received. There is a great sense of community among PhD candidates, and they seem well-organised within their universities. The Committee noticed that especially the PhD candidates (like the assistant professors) had internalised the requirements of open science and, in doing so, set an inspiring example for the senior researchers. On a more critical note, the Committee noticed a lack of clarity among some PhD candidates concerning the requirements for a dissertation. The Committee recommends the programmes to consider possible sources of discontent and find ways to mitigate them. Similar to the 2017 research review, the Committee also encourages supervisors and management to make sure that PhD candidates plan a trajectory that is feasible within the allotted contract time.

### **A Period of Transition**

The Committee has observed that Dutch psychological research is currently thriving but is undergoing a period of multiple concurrent transitions. Some of these transitions are of a cultural nature, such as changes in the academic climate and human resource policies, while others are rooted in research policy, particularly the increasing emphasis on societally relevant research. And of course, coping with transition is a constant demand in psychological science because it is growing, maturing, and embracing new technologies. The most striking characteristic of the current transition period is that so many transitions occur simultaneously. The multitude of highly varying transitions may have the effect of obscuring what precisely is going on at what time. This uncertainty makes it difficult to recognise whether the outcomes align with the intended objectives and hinders the ability to intervene when necessary and guide the processes in the desired direction.

Despite the general impression the self-studies expressed, and the interviews confirmed, as well as the positive if not enthusiastic signals the Committee received, the Committee was not always convinced that the programmes are in control of the processes the programmes and their management set in motion. While the Committee acknowledges the uncertainty that significant changes may cause at their onset, it also wishes to emphasise the necessity to be in control as much as possible to avoid undesirable effects that, once effective, may prove hard to correct or to mitigate.

Given the transitions through which Dutch psychology must find its way, the Committee recommends monitoring the execution of these changes in relation to their realisation and workload issues. Monitoring needs to be done at the programme level but perhaps also at the overarching level of all programmes, including the programmes not included in this assessment. In addition, the Committee recommends the programmes to profit from the scientific knowledge available in the faculties concerning change processes in organisations and principles of personnel selection, assessment, and promotion, as well as knowledge about coaching expectations of work conditions, performance assessment, and career planning. Finally, the Terms of Reference state: 'The SEP assessments help to monitor and improve the quality of the research conducted by the research unit.' Given the ongoing period of transition in which the programmes are situated, the Committee recommends that



programmes closely monitor the quality of their research, find a way to assess the quality that is consistent with the SEP requirements and design an assessment procedure that enables the international benchmarking at any given moment.

All programmes worried about the plans the Government has restricting the number of bachelor programmes in the English language. If these plans become effective, English-language bachelors may have to be terminated. Because financing of universities primarily depends on the number of first-year bachelor students and the number of master diplomas, both including a research supplement, any reduction of the number of international students would also have serious consequences for the research programmes' resources, possibly involving staff reduction, a decreased attractiveness of Dutch universities for international staff, and negative consequences for research quality. The Committee has no other option other than to notice and acknowledge this worry.

### Recommendations

The Committee holds great esteem for the quality and depth of Psychology in the Netherlands. Nonetheless, from an external perspective, we have identified several potential avenues for further advancement and enhancement in Dutch Psychology. Therefore, we provide several recommendations. We hope these recommendations will aid Dutch Psychology research in elevating their excellence to new heights and solidifying their status as leading institutions, both nationally and internationally, in the years ahead.

The Committee recommends:

- To quantitatively monitor the progress in aligning the programme research focus with the three chosen SSH themes, assess whether sufficient progress has been made, and monitor the influences that facilitate or hamper this alignment.
- To quantitatively monitor and report the progress of open science activities, including preregistration of research plans, data storage compliance, and data publication and publish these results annually on programme websites.
- To implement a career-expectation management programme across all eight faculties and regularly evaluate its effectiveness. This programme should encompass providing clarity regarding career opportunities, performance expectations, and the necessity of acknowledging a certain level of uncertainty in career development.
- To provide researchers who prefer to work in smaller groups or alone the possibility to do so, to make clear that their preference does not damage their career prospects, and to address any concerns and uncertainties in this regard.
- To be transparent about the principles on which the personnel selection policy is grounded, considering the acknowledged tension in personnel and selection psychology between prioritising specific subgroups and emphasising individual talent.
- To clarify within institutions the interplay between fundamental and applied research and to allow researchers to engage in fundamental research even when it does not produce directly applicable results.
- (Directed at Executive Boards) To consider aligning the funding for instrumentation, which includes facilities and specialised personnel, with the standards typically established for the natural sciences.
- To address the lack of clarity among some PhD candidates regarding dissertation requirements.
- To implement a monitoring process to oversee the execution of the ongoing transitions in Dutch psychology. It is advisable to conduct monitoring at the programme level and possibly





extend it to encompass all psychology research programmes, including those not covered in this assessment.

- To develop a consistent assessment method in accordance with the SEP requirements to monitor the quality of the research and establish an assessment procedure that enables international benchmarking at any given moment.



## 3. Vrije Universiteit Amsterdam

### 3.1 Organisation, strategy and targets

Psychology at the Vrije Universiteit Amsterdam aims to understand the human mind and its normal and abnormal functioning, and how functioning drives behaviours relevant for mental and physical health. Psychology is a relatively large unit with a strong commitment to research, as reflected by 194 researchers who constitute 107 research FTE. Psychology is part of the larger Faculty of Behavioural and Movement Sciences. Psychology consists of three departments: (1) Biological Psychology; (2) Clinical, Neuro-, and Developmental Psychology; and (3) Experimental and Applied Psychology which includes social, cognitive and organisational psychology. The departments are connected through interdisciplinary research institutes.

The Vrije Universiteit's strategy for the period leading up to this review was to deliberately select target research areas that are intellectually and technically challenging, and internationally competitive in psychological science. This strategy aimed to generate high visibility on indicators of impact such as citations, journal quality, grant funding, and valorisation. The Vrije Universiteit articulates awareness that it competes on an international stage. Each departmental group is autonomous, well-resourced, and working toward an ambitious agenda. Each group is headed by a strong scientific leader who is responsible for providing an internal environment that is supportive of science and fosters an external environment of institutes, centres, and labs. Timely topics in psychological science are on the table at Vrije Universiteit Psychology, including integrity, open science, team science, diversity, social safety, and the like. The self-study describes a strategy that it calls 'high-risk, high-gain.' This is a bit different from the way the term 'high-risk, high-gain' is usually defined. Specifically, at the Vrije Universiteit the 'high-risk' strategy enables researchers to take risks on innovative curiosity-driven basic-science projects, because any failures are offset by successes in the department's portfolio. The 'high-gain' strategy works toward consolidating findings and augmenting translational impact through meta-analyses and collaboration with international collaborative networks and consortia, industry, and health-care services.

### 3.2 Research quality

The three research departments all show an impressive publication performance in terms of placement in high-impact journals and subsequent citation counts, showing the findings are being used and having impact. The quantity of publications is remarkable, at a mean of 5 publications per year per research FTE. A large percentage of papers are in the top 10% by field, and over 70% have been published open access in recent years. Unquestionably the scientific impact of research is very high on all traditional quantitative indicators. Qualitative indicators are also very high-level, as indicated by the following: Numerous prestigious research grants are held by each of the research departments, with an enviable balance of grant funding from within the Netherlands and from international funders. Grants signify that a scientists' plans have been vetted through peer review, suggesting that research quality will remain high in the future. Following this indication, there are 26 personal fellowships within the departments, showcasing a remarkable history of external funding for individual researchers' projects. The current heads of the three departments all have strong scientific reputations and are well respected and visible internationally. In addition, researchers hold numerous positions of scientific leadership outside the Vrije Universiteit, indicating esteem within the Netherlands and internationally. A considerable number of awards and prizes have been made to researchers recently (64), plus 3 honorary doctorates. Notably several of the awards are to early-career researchers (early-career awards, young scholar awards, rising



star award, young talent awards). The quality of instruments and infrastructure developed with the departments is admirable, for example, the Netherlands Twin Register contributes top-flight genomics research opportunities for scientists inside the Vrije Universiteit and scientists in consortia worldwide. It is critical infrastructure for scientists around the world. Likewise, the Vrije Universiteit Ambulatory Monitoring System is widely used, as is increasingly the Hexaco personality assessment. Overall, the research that is executed at the Vrije Universiteit is technologically and methodologically innovative, leading to successful publications, grant applications, and other indicators of quality.

### 3.3 Societal relevance

Relevance to society of the Vrije Universiteit psychology research was well demonstrated in the self-evaluation report and in interviews with the Committee. In general, a Vrije Universiteit philosophy is that if research quality is excellent, this augments the likelihood that findings will be translated to be useful for society. Wisdom tempers the pursuit of societal relevance, in that the Vrije Universiteit leadership considers that research to test replication and robustness of findings and to understand mechanisms behind findings is advisable, rather than a headlong rush to application. The Amsterdam Leadership Lab is an impressive example of service to the business and government leadership community. Outreach to engage the public in psychological science is a real strength of this psychology unit, featuring researchers who are involved in television programmes, media appearances, trade books, and theatre. Also impressive is the Netherlands Twin Registry as a national point of scientific pride, with around 25% of all twins in the Netherlands taking part in research projects at the Vrije Universiteit. The national Twin Registry provides unique opportunities for societally relevant applications, such as polygenic score risk diagnostics through industry partner Avera Health, and dementia diagnostics through the Alzheimer Centre. The three departments are actively engaged in advising health policymakers, for example, policymakers at the Dutch National Health Council, WHO, UNESCO, and the Dutch Ministry of Justice. A good example of valorisation is the development and implementation of e-health applications in close cooperation with mental health care providers, health insurance companies, and technology companies. Overall, there is ample evidence of responding to society in collaborations as well as in outreach to share the results of the research. There is a substantial amount of contract funding, and the income from business valorisation is often fed back into the departments' research funds, a practice that creates a self-perpetuating cycle of activities to enhance relevance.

### 3.4 Viability

The departments' plans emphasise growth and achievement. It remains true that the continuously high level of external funding across the entire review period, the excellent quality of staff at all levels of seniority, the impressive infrastructure including access to imaging facilities and expertise, and the unique asset of the Netherlands Twin Register, all come together to provide a sturdy basis for scientific viability in the years to come. The 2017 report recommended that the Netherlands Twin Register and the neuroimaging facilities ought to have structural long-term financial support, and the Committee learned the happy news that this indeed came to pass. The departments' focus on large-scale team-science collaborations, meta-analyses, and links with industry and valorisation agencies are forward looking. Clear and concrete plans for continued growth were articulated. For example, the biological psychology department recognises that whereas fundamental science dominated its activities in the past, genomics in the near future presents opportunities to work on applied diagnostics and treatment technologies. The 2017 review was concerned that a goodly amount of the scientific drive is embodied in senior professors who will retire over the next decade. This concern remains on the table today, and



the Committee was reassured that steps have been taken to prepare for these retirements, moving researchers who have leadership potential and preparation up into the senior roles. At the same time, the Vrije Universiteit is planning for retired seniors to continue to be accessible for input, advice, and consultation. Departmental management encourages early-career researchers to develop leadership skills, to ensure that new and highly qualified leaders will be ready to take over. There is a considerable amount of local talent. Staff are in place to support activities such as valorisation, start-ups, business development, and grantsmanship. Broadly, the university's strong reputation and its location makes the Vrije Universiteit an attractive location for talented researchers, and this appears to reduce the churn that draws the best early-career science leaders away to improve their situations at other universities or in industry. Indeed, 25% of research staff are not Dutch, confirming that VU is an attractive setting for career-building. English is used in the departments' activities including teaching at all levels, meetings, and written internal communications, a choice that has been important to its success and support viability going forward.

In general, the strategic planning for viability in the future remains centrally based on the idea of ambitiously promoting excellence, which attracts the best people and resources, and which has been a recipe for success so far.

From the departments' current position of strength, now is an excellent time to carry out formal long-term horizon scanning, including a formal risk assessment. This activity consists of inviting academic staff at all levels to list all possible things that could go wrong. Next, each is scored on its likelihood of occurring, and next also scored on how damaging the impact would be if it did happen. Finally, each event is categorised according to the time scale for action: act now, develop a plan, or just keep an eye on it. For example, if a possible event is both likely and catastrophic, there is more urgency than if a possible event is unlikely and, in any case, not very damaging. What kinds of events could be considered for the Vrije Universiteit Psychology in a risk analysis? A major misconduct case in the media, Sector Plan SSH funding stops, a new finding cuts off a major line of research, unexpected death of an important senior leader, a government requirement for teaching in Dutch, early-career academics reduced publication output as a result of the Recognition & Rewards programme, and so on. Forewarned is forearmed, especially from the Vrije Universiteit's position of strength.

### 3.5 PhD policy and programme

All PhD candidates participate in the Faculty of Behavioural and Movement Sciences graduate school. The faculty's 'high-risk high-gain' strategy is echoed through the interviewed PhD candidates. For example, when asked about delays in PhD trajectories, the interviewed PhDs acknowledged that ambitious projects may take longer than the allotted contract time, but they are motivated to complete these because these projects may yield results with higher scientific impact. The Committee advises to assess the pressure that comes with these risks and the extent to which they have been distributed between senior staff and PhDs. Similar to the 2017 research review, the Committee encourages supervisors and management to make sure that PhD candidates plan a trajectory that is feasible within the allotted contract time. The Committee of the 2017 research review also encouraged the faculty to enhance the sense of community between PhD candidates and the faculty as a whole. The Committee acknowledges that the Covid19-pandemic has put extra strain on this suggestion. Nevertheless, the Vrije Universiteit has put noticeable effort into increasing safety and cohesion among this group, such as the implementation of an independent PhD advisor.

PhD candidates complete an extensive training programme, which is formalised in an individualised Training- and Supervision Plan. The Training- and Supervision Plan is used in yearly evaluations of the PhD trajectory, which helps to accommodate for risks. Supervision is also evaluated during these yearly



meetings. The training consists of mandatory courses (such as an ethics course), as well as elective courses that add to a total of 30 ECTS. The interviewed PhD candidates seemed to be happy with the programme overall. Specific attention goes to PhD candidates who fall outside of the employment system because they may not get the same opportunities as their employed peers. The programme takes effort to prepare PhDs for their future, such as a career orientation courses and the Startup Hub.

### 3.6 Open science

Open science is embedded in the Vrije Universiteit Psychology culture at all levels today according to the self-evaluation report. More than 70% of publications are open access. Practices such as preregistration of research plans, FAIR data-sharing, posting data and code, using meta-analysis platforms created within the departments, and posting preprints are all now common practice within the departments according to the self-study. For example, MetaPsy supports empirical testing for the robustness of interventions. As another example, pre-registration is part of acquiring access to the Netherlands Twin Registry data. The Vrije Universiteit departments, like many places, struggle with the inconsistent demands and conflicts between (a) open-science easy-access data-sharing, and (b) privacy legislation regarding protection of research participants' private personal data. Researchers are tasked with showing that they share participants' data openly and at the same time with showing that they avidly protect participants' privacy. This struggle is ongoing. This struggle is particularly relevant for the Twin Register and for research into refugee mental health, but it is well managed.

Open science is also in service of promoting research integrity, which is covered below under academic culture.

### 3.7 Working environment and personnel policies

#### 3.7.1 Academic Culture

Overall, open science and research integrity policy and practices are well internalised in the research culture, and yet the self-evaluation report rightly acknowledged that sustaining integrity over time will demand ongoing awareness and cultural change. Research integrity policy and protocols at the Vrije Universiteit and the Faculty of Behavioural and Movement Sciences consist of several elements: institutional policies and regulations, training and supervision, independent review of scientific quality and auditing, plus reporting and investigating violations. In practice, this means that researchers are expected to adhere to the research data policy, ethical codes, and codes for scientific integrity. The policy and protocols are operationalised and supported by The Scientific and Ethical Review Board and the Research and Policy Support Team. PhD candidates receive integrity training and (new since 2020) there are PhD student advisors for integrity. Beyond open-science culture, social safety is understood, for example, there are seven advisors for PhD candidates who meet frequently, there is a team-level coaching scheme, and departmental messaging emphasises that scientific excellence is not something one achieves alone but requires people with different complementary skills working in teams. Culture was challenged by a case in 2020, and COVID-19 also ruptured social cohesion among staff as it did everywhere. These experiences put the academic culture topic on the agenda for the VU departments, and the leaders seem to be aware of this and monitoring it.

The Committee advises the Vrije Universiteit to build in formal empirical evaluation plans for new policies, practices, research endeavours, and initiatives. Many changes appear to be wholly positive when newly implemented, but the law of unintended consequences can eventually bring about



unexpected downsides. Departments that value empirically informed decision-making, as do the Vrije Universiteit Psychology departments, can benefit from planned collection of data on the outcomes of initiatives.

### *3.7.2 Human Resources Policy*

The Recognition & Rewards programme is welcomed particularly by early-career researchers at the Vrije Universiteit, who note that it lowers stress because staff can be evaluated on their teaching and valorisation activities, in addition to the more traditional publications and grants. The Sector Plan SSH is working at the Vrije Universiteit to give early-career researchers support so they can mature their thinking and their research rather than feeling insecure with pressure to get grants quickly. Management is aware of the potential for brain drain due to fierce competition for staff with other Dutch universities, international universities, and industry. The self-evaluation report named ‘the current collective labour agreement’ as a threat, as it may lead to reduced opportunities for early-career researchers to move up. However, overall, the early-career academics expressed strong satisfaction with their positions and prospects, as did staff at all levels in our interviews. Nevertheless, the Committee noted that academics with a postdoc position can get lost between the emphasis on programming for PhD students and programming for assistant professors. The Committee therefore recommends considering and evaluating the Vrije Universiteit’s stance toward research staff with a postdoc position.

## **3.8 Conclusions and recommendations**

### *3.8.1 Conclusion*

The research output and scientific impact of the three psychology departments at the Vrije Universiteit Amsterdam are impressive, based on the internationally visible academic reputations of the researchers, numerous prestigious national and international prizes, and the value of research grants and individual fellowships acquired. The unit’s research is technologically and methodologically innovative, and it investigates topic areas and questions that are significant and cutting-edge in the field. The departments’ convincing relevance to society is attested to by the Twin Register’s outreach, extensive connections with international and social organisations, active outreach to the public, and a substantial amount of contract funding for applied research. The department’s viability is exemplary, based on its forward-looking and savvy management leadership, the large steady flow of external funding, the high quality and stability of the research staff, and the impressive research facilities. Academic staff expressed satisfaction, confidence, and pride in being a part of the Vrije Universiteit Psychology, with virtually no reservations.

### *3.8.2 Recommendations:*

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

- Make quantitative self-evaluation part of the ongoing culture by building in formal empirical evaluation plans for new policies, practices, research endeavours, and initiatives.
- Conduct a formal long-term horizon scanning and risk assessment.
- Consider and evaluate the Vrije Universiteit’s stance toward post-doctoral research staff.



- Facilitate equal opportunities, as far as is practically possible, for both employed PhD candidates and PhD candidates on other contracts, such as research budget and community participation.
- Increase communication across teams to share the best practices and standard operating procedures of individual research teams at the Vrije Universiteit, which could benefit other teams.
- Prepare associate professors for future senior management roles, with the aim to achieve greater diversity among leaders at the top.



## 4. University of Amsterdam

### 4.1 Organisation, strategy and targets

The Psychology Research Institute (PsyRes) of the University of Amsterdam investigates the cognitive, affective, and behavioural aspects of the human mind and its functioning. It hosts six research groups that broadly correspond to the classic subfields of psychology: Brain and Cognition, Clinical Psychology, Developmental Psychology, Psychological Methods, Social Psychology, and Work and Organisational Psychology. PsyRes is the largest psychological research institute in mainland Europe and as a result its research portfolio is both broad and deep. In the assessment period PsyRes had seven strategic aims:

1. Continue orientation towards fundamental, quantitative, and experimental research and maintain the high quality of research.
2. Increase opportunities to strengthen societal impact.
3. Sustain success rate in the acquisition of external grants.
4. Stimulate interdisciplinary research endeavours, both within and outside the institute.
5. Increase external visibility of the institute.
6. Increase diversity amongst staff members.
7. Remain at the forefront of promoting good research practices.

### 4.2 Research quality

There is no doubt about the outstanding quality of the research conducted in PsyRes. This is evidenced by the high number of publications in prestigious journals, by the substantial grant income, by awards made to individual members of staff, and by the citation data reported both in the self-evaluation and in the national self-evaluation documents.

The quality of PsyRes research is reflected by its top 20 position in all major rankings for the Psychology domain. In 2022, PsyRes ranked 9th in the QS ranking, 10th with USNews, 14th on the Shanghai Index, and 17th on the Times Higher Education ranking, which corresponds to a top position in mainland Europe. PsyRes research tends to be published in high-impact outlets. An international bibliometric benchmark shows that among institutions in the core areas studied within PsyRes, the UvA ranks second globally both in terms of paper count and total citation count, and first on Field Weighted Citation Index (FWCI).

The academic stature of PsyRes researchers is further demonstrated by their participation in the international process of publication and research evaluation: they serve as journal editors or associate editors, contribute to editorial and review boards, review grant applications, organise and participate in conferences, and deliver lectures in research schools. Furthermore, they are frequently invited as speakers to international conferences, and organise such conferences.

In the last five years, PsyRes has acquired €45M in grant funding, with the percentage of second stream income rising from 10,7% in 2017 to 22,3% in 2022. It is also evident that the high quality of PsyRes research is evenly distributed across the six programme groups, all of which are performing at a high international level.

In short, there is strong evidence that PsyRes has been successful in achieving aims 1 (high quality research) and 3 (acquisition of external research grants) of the seven strategic aims described above.





### 4.3 Societal relevance

PsyRes recognises the importance of its research for society and seeks to achieve this through collaborations with partners, developing tools and interventions, training the next generation of academics and professionals, and engaging with professionals, stakeholders, and the public. Good examples of societally relevant research are to be found in each of the six programme groups. Noteworthy examples are the externally funded nationwide research infrastructure to investigate poorly understood conditions such as ME/CVS, long COVID, Lyme disease, and Q-fever, which is led by members of the Clinical Psychology group; and the platform 'Data versus Corona', supported by a COVID-19 Urgent Grant, set up by members of the Psychological Methods group with the aim of using their skills as data scientists in helping society to combat the virus.

Evidence of the success of PsyRes efforts to produce societally relevant research can be found in the fact that contract research represents a healthy percentage of the total research income, ranging between 14% and 20% during the assessment period.

At the same time, PsyRes recognises that more needs to be done to increase the societal relevance of its research portfolio, which has in the past tended to focus on high quality fundamental research. To encourage its staff to address societally relevant research problems, it has introduced seed funding (Impact Grants, worth up to €25k) to help researchers develop collaborative research projects with external partners. PsyRes currently has 3 endowed chairs and plans to increase this number in the future to strengthen the links with external organisations.

### 4.4 Viability

PsyRes has developed the following strategic aims for the coming six-year period:

1. Stimulate collaboration and interdisciplinary research endeavours, both within and outside the institute.
2. Increase the institute's visibility and raise its profile, while preserving the freedom of individual researchers to pursue their interests.
3. Facilitate differentiation within teams of researchers, aiming for more synergy between fundamental and applied research.
4. Pave the way for differentiated career paths that do not only favour fundamental, but also applied research involving societal stakeholders.
5. Create a sustainable funding situation in accordance with its strategic aims.
6. Strike a balance between maintaining the breadth of its research and providing incentives for developing particularly promising foci.
7. Promote diversity, inclusivity, and equity.
8. Remain leading in developing and promoting good research practices, such as research integrity.

In the Committee's view, these aims are ambitious but appropriate, aiming to strike the right balance between maintaining PsyRes' established strengths in fundamental research and enhancing its ability to deliver research that is societally relevant. The PsyRes management group appreciates the importance of applied research and seeks to encourage and facilitate it, but at the same time recognises that such work typically depends on high-quality fundamental research, and that those members of staff who are better suited to fundamental research should also be enabled and encouraged to pursue it (hence the aims of facilitating differentiation within teams of researchers, and of paving the way to differentiated career paths).



PsyRes encountered a very challenging financial scenario during the previous six years but through collaborative and cooperative efforts at all levels of the institute found an effective way to address and overcome this problem. The Committee's impression is that the unit emerged stronger as a result of this experience. Committee members were impressed by the open and collaborative spirit that was evident in discussions with groups at all levels of seniority, which reflects well on the quality of the management team. This suggests that PsyRes is well equipped to meet the challenges that it will face in the next six years.

#### 4.5 PhD policy and programme

The Graduate School of Psychology is responsible for the training of PhD candidates. The interviewed PhD candidates were positive about the opportunities offered and valued the flexibility to tailor their PhD trajectory to their wishes. A downside of this policy is the lack of clear-cut expectations about activities and research output. The Committee advises that PhD candidates' ideas about what is expected should be actively managed and expectations subsequently formalised, for example, during the annual review of the Training and Supervision plan. The variety of opportunities for PhDs is also reflected in the recruitment of PhD candidates for cross-disciplinary projects. In these cases, supervisory teams consist of (co)promotors from various disciplines. Interviews with senior staff show that they are aware of the risks that may be entailed in such projects.

Employed PhD candidates carry out teaching activities for 5-10% of their contract hours. Interviews with PhD candidates revealed mixed feelings about this requirement: teaching may be experienced as a distraction from or a welcome addition to their research training. This suggests a need to communicate clearly about the load of non-research activities, as well as the reasons why employed PhD candidates are expected to perform these activities. The Graduate School has initiated a pilot with 5.5-year contracts with a higher teaching load of 29% of the contracted hours. The self-evaluation report describes the potential benefits for both the PhD candidate and PsyRes. The Committee advises that the outcomes of the pilot should be monitored, particularly with respect to completion and subsequent employment, with adjustments made if needed.

In their report, the 2017 Committee suggested that the sense of community among PhD candidates should be enhanced. This has clearly been picked up: the 2023 self-evaluation report mentions initiatives designed to increase community and well-being among PhD candidates. The interviews with PhD candidates reflected the positive effects of these efforts. Indeed, one PhD project studies the well-being of PhD candidates, which is an excellent example of how in-house research can lead to improvements in practice.

#### 4.6 Open science

It is evident that PsyRes values the principles of open science. Indeed, members of the Psychological Methods group have played a prominent role in advocating for open science and in making it practically possible. This has borne fruit. For example, the percentage of PsyRes publications that are openly accessible rose from 55% in 2018 to 92% in 2022.

PsyRes requires its researchers to practise good research data management throughout the research cycle, from the moment of planning data collection until the final publication of research results. The previous six years have seen a rapid succession of developments, including the appointment of three data stewards who help researchers with research data management following FAIR principles. Staff are generally happy with these developments, although there are some issues relating to General Data



Protection Regulation (GDPR) and to inconsistencies between PsyRes procedures and systems used in the wider university.

## **4.7 Working environment and personnel policies**

### *4.7.1 Academic Culture*

The Committee gained the strong impression that the academic culture in PsyRes is characterised by openness and inclusivity. Issues of social safety were explicitly discussed with PhD candidates and early-career researchers, and all present said that they feel safe working in PsyRes and that they value the attention paid to their personal wellbeing.

### *4.7.2 Human Resources Policy*

PsyRes has greatly improved its profile with respect to gender diversity and is on track to achieving a more equal balance between male and female staff. At the same time, it recognises that there are other facets of diversity, such as ethnicity, where it is less successful. It is addressing the broader diversity issue in a number of ways, advised by a Diversity Advisory Committee led by a senior member of staff, focusing especially on recruitment. There is increasing cultural diversity among students taking the Research Masters courses, which will hopefully percolate up to PhD level and beyond.

The Committee noted that the current mentoring system for early-career researchers is ad hoc and voluntary.

The Committee discussed the issue of career progression with senior staff and with early-career researchers. All parties acknowledged the restrictions posed by the formation model, which limits the prospects for promotion. Given that PsyRes seeks to appoint early-career researchers who are already successful and ambitious, it is no surprise to find that Assistant Professors who see the limited prospects for future promotion feel frustrated. They value the open way in which the situation is discussed with senior colleagues but nevertheless experience the situation as potentially demotivating. The Committee noticed that their emphasis on career perspectives, admittedly of great importance to the individual, tends to cloud their appreciation of the positive aspects of the job and advises management to pay attention to this circumstance.

## **4.8 Conclusions and recommendations**

### *4.8.1 Conclusion*

The quality of PsyRes research is admirable, as reflected in its publications, impressive grant acquisition, and the strong international profile of many of its staff. PsyRes is taking good initiatives to ensure that its research portfolio as a whole achieves a good balance between fundamental research and societally relevant research. The strategic aims for the next six years are detailed and appropriately ambitious, and the Committee therefore assesses the viability of the research unit to be high.



#### 4.8.2 Recommendations

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

- Ensure that moves to encourage more societally relevant research are not made at the expense of what PsyRes has traditionally done very well, namely high-quality fundamental research.
- Identify additional ways in which the bottom-up and programme-group-based research culture in PsyRes could be complemented by attractive incentives to collaborate across programme groups and with other disciplines.
- Consider implementing a systematic and obligatory mentoring scheme for early-career researchers.
- Address the knotty issue of career progression for early- and mid-career staff by ensuring that realistic perspectives for progression are discussed openly and transparently at all stages, from recruitment onwards. This could include discussing ways in which staff who feel frustrated by the limited opportunities for promotion could identify alternative means of achieving job fulfilment.
- More actively manage PhD candidates' ideas about what is expected in a good thesis, especially with respect to the volume of empirical work. The Committee recognises that there will be variation from subfield to subfield and from one candidate to another but having greater clarity on this variation would help candidate wellbeing and might also result in speedier completion, without sacrificing the quality of the work.



## 5. Open Universiteit

### 5.1 Organisation, strategy and targets

The Faculty of Psychology at the Open Universiteit consists of five departments: Clinical psychology, Health psychology, Lifespan psychology, Theory, methods and statistics, and Work and organisational psychology.

The self-report document articulates clear strategic goals to (1) develop a unique research profile with a more focused approach; (2) strengthen the PhD policy and implementation, and number of PhDs; (3) improve research infrastructure and quality systems; (4) promote a transparent, safe, and ethical research climate and open science policy; and (5) enhance involvement in multidisciplinary research and contribute to sector plan themes. These goals have clearly been developed after careful consideration of the recommendations in the 2017 review report, and the faculty leadership are to be complimented on this. In particular, the strategy to expand PhD numbers has been successful (an increase from 19 in 2016 to 57 in 2022). The 2017 review committee recommended more focus for the research programme and that a unique research profile should be chosen. Accordingly, the new and more focused research programme ‘Understanding human change in a dynamic and digital era’ studies sources of change and their impact, such as external changes (e.g., new technologies, intensification of life, the COVID-19 pandemic, divorce), internal changes (e.g., gaining body weight, developing anxiety symptoms, growing older, disease diagnosis), and necessary changes that can be accomplished by natural human adaptation processes or with interventions, treatment, and/or education (e.g., lifestyle changes, anxiety treatments, workplace learning). The programme has the potential to address fundamental questions about the societal impact of digitisation on human behaviour and human flourishing. There are strong links between the research programmes and the undergraduate and postgraduate teaching portfolio of the unit, while several of the research strands have clear relevance to policy both in education and more broadly to society.

### 5.2 Research quality

More than other universities, the Open Universiteit is teaching-focused, addressing often older students (but in principle, any students) that prefer distance education, and the research programme is still developing, with a guideline for research time of 30% of FTE. This strong educational focus naturally has an impact on the quantity and quality of the research produced and hence on international reputation. However there has been a clear growth in output since the 2017 research review, with an almost twofold increase in publication numbers per annum and an increase in external funding. The physical research infrastructure naturally differs from other universities, but the physical and digital infrastructure is developing, thanks in large part to the investment resulting from the Sector Plan SSH. The Open Universiteit has a unique opportunity to develop reputation within the eLearning environment, open-source software, etc., and should capitalise on this feature, especially given existing collaborations with informatics and educational sciences.

The Sector Plan SSH has greatly benefitted the faculty in terms of staff numbers and research output. The three sector plan themes chosen were 1) societal inequality, 2) new technologies and 3) societal transition. These themes aligned very well with the existing research programme and with the faculty’s research ambitions and provided the focus recommended in the 2017 research review. Strategic hiring decisions could be made as a result and that has driven growth in staff and student numbers. For example, one department more than doubled in staff; it now has many young staff and one central



theme (adaptation and changing workplace) which gives focus and sustainability to the programme. The Committee has the impression that the staff feel that they need to enter a period of stabilisation following this growth to capitalise on the investment made thus far. The fact that the themes that have been chosen crosscutting the existing research programmes has enabled collaboration between researchers across the constituent departments and fostered development of multidisciplinary projects that increase research activity across all staff. There is capacity to further develop international collaborations, which will increase visibility and reputation. This development was interrupted by the pandemic but there is an ambition among senior management to develop in this area.

### 5.3 Societal relevance

The applied nature of much of the research activity, stemming from the unique student population that often are affiliated with institutions and organisations relevant to Open Universiteit research, is a key strength of the Open Universiteit that centres their research within a broad societal framework. The older student population with its access to various relevant data sources through their largely clinical work affiliations is an advantage that the faculty are capitalising on. Key themes and projects include the use of AI in care organisations, behaviour change, AI and ethics, cancer survivorship, etc., all of which have obvious societal relevance. Regional collaborations with stakeholders appear to be a potential area of growth. It will be interesting to see how outputs translate more directly to influence policy in due course.

### 5.4 Viability

The faculty's focus on applied research enables viability and sustainability of the research programme, given the national imperatives for societally relevant research. Regarding practical support, the fact that only limited support staff is available for research is a risk to both sustainability and growth. Further investment in this area is advisable. The provision of two funded PhD students within the programme is an excellent development that should be expanded, especially as an initiative to enable early-career staff to gain experience with PhD supervision. On this note, staff were happy with their opportunities to supervise PhD students, with many staff interviewed supervising multiple PhD candidates. There is a strong synergy between the faculty plan and the institutional plan, due to the bottom-up approach taken in the development of the institutional plan. This strengthens the position of the faculty within the university and enables the faculty to contribute to the multidisciplinary focus of the institute from a psychological point of view.

### 5.5 PhD policy and programme

The recent increase in funding for research has led to a large growth in the number of PhD candidates. The Open Universiteit has used its relatively small scale and highly collaborative environment to its advantage. The unique position of the Open Universiteit in the Dutch academic landscape creates distinct opportunities for those who wish to pursue a PhD in an applied setting. This is evident from the number of current PhD candidates with strong ties with practice. The diverse background of PhD candidates requires flexibility from the Graduate School. Nevertheless, the interviewed PhD candidates were content with their training and supervision. PhD candidates must follow courses on scientific ethics, research integrity, and data management and they also have a research budget of €5000.

The 2017 research review and the recent SWOT analysis mention various caveats for PhDs, such as interaction and career orientation. Interviews with PhD candidates revealed that contact with peers



very much depends on individual circumstances, and mostly occurs in the context of the Graduate School. The Committee advises that this be evaluated with the needs of PhD candidates in mind and accommodations be made accordingly, preferably using the Graduate School as a recognisable resource. Furthermore, many PhD candidates are now in the middle of their trajectory. The Committee encourages the faculty to ensure that PhDs finish their trajectory within the allotted time. Clear communication of expectations of research output is key.

The interview with senior staff suggested that PhD candidates may stay as an assistant professor after obtaining their degree (however, this is not policy). The Committee suggests a pro-active policy in career orientation, to offer opportunities in personal professional development, and to be realistic about the career prospects of their PhD candidates. It is important to understand why PhD candidates choose the Open Universiteit's PhD programme, and what is necessary to retain employees after obtaining their degree.

## 5.6 Open science

The Open Universiteit has several strategies in place to encourage open science policies and adherence to the FAIR data policy, such as making research information available on their websites, promoting posting of preprints, and requiring data management plans for research projects, in the first instance for PhD projects but with the aim of extending this to all staff. The university states that the aim is to have 100% open access. This is encouraged by, for example, the provision of an open access fund in case no such budget exists within research projects. Overall, the Committee felt that these actions taken to boost open science and responsible data management seem to refer to the faculty's administration and less to the researchers who must realise these actions. The open science culture is well embedded at the early-career stage (PhDs and assistant professors) and it would be valuable to see this develop across all student and staff groups. The Committee recommends that in the coming years, concrete action is taken to move from mainly voluntary towards mandatory open science practices.

## 5.7 Working environment and personnel policies

### 5.7.1 Academic Culture

The expected policies on ethics and research culture are in place and seem to be implemented well, with no staff raising concerns about ethical practices or social safety.

Among the early-career group, the Committee had the impression that, while they are ambitious, the working environment was just as important to them as the possibility of promotion. This group was broadly satisfied with its environment and opportunities and enjoys the benefits of good working relationships with each other in both education and research. A team science culture is continuing to develop. It is noteworthy that some staff choose to stay at the Open Universiteit rather than accepting tenured track positions in other universities, specifically because they value the academic culture at Open Universiteit. They also felt that they had good access to senior management and could provide input for decision making, both formally via staff meetings and informally due to the collegial environment.

This theme of teamwork and general satisfaction with the working environment was also apparent across other groups of staff. However, the limited time for research was a concern to some staff, especially if research output is a key metric for promotion. Further to this, management should take all measures possible to safeguard the 30% research time, for example, increasing efficiency in research



processes and supporting grant writing. Gender balance is excellent across the board, but other aspects of diversity should be considered, including developing a more international staff profile. The fact that meetings are generally held using the Dutch language is a potential constraint to diversity of staff profile and conducting at least some business in English may remove an impediment to recruitment of international staff.

The requirement for staff to attend two days per week at Heerlen was considered an unnecessary constraint by some staff who live elsewhere or whose activity is carried out in other locations due to the unique education profile of Open Universiteit; a more flexible arrangement could facilitate more efficient working and development of research collaborations nationally and internationally.

#### *5.7.2 Human Resources Policy*

The faculty was able to hire new staff members as a result of the Sector Plan SSH. There was an open recruitment call, especially at associate professor level, and these posts were filled with external candidates.

Regarding the Recognition & Rewards programme there was a sense that the existing promotion criteria were old fashioned and needed revision, but that the Open Universiteit was awaiting policy in other universities before operationalising its own. This delay and corresponding lack of clarity may weaken staff morale. Career development and a clear policy with respect to recognition and rewards specific to the unique needs and position of the Open Universiteit should be developed and implemented as soon as possible.

## **5.8 Conclusions and recommendations**

### *5.8.1 Conclusion*

The research activity at the OU is continuing to grow and flourish, despite the large educational responsibilities, with Psychology providing approximately 40% of the educational activity of the Open Universiteit. Overall, the Committee encountered a supportive working environment for research by staff at all levels that is rewarded by a strong commitment from staff to the institution. Staff feel that they have a lot to offer to the research community and that they benefit from an interesting student population with strong links to professional practice and to applied research, providing a good foundation for future research growth and impact.

### *5.8.2 Recommendations*

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

- Invest in more research support, especially in grant support at both pre- and post-award phases.
- Continue to develop the unique strengths in research on digital interventions.
- Consider a more flexible arrangement for attending the Heerlen location, to promote efficiency and foster national and international research collaborations.
- Ensure that a clear and specific policy is developed concerning Recognition & Rewards initiative, considering responsibilities in both teaching and research.





- Consider strategies to make the programme more attractive to international staff within the constraints that educational responsibilities typical of the special status of the Open Universiteit place on research time.
- Invest in expanding the provision of PhD studentships as a means of driving research growth.
- Further invest in academic support to protect or, ideally, increase the 30% research FTE.



## 6. Utrecht University

### 6.1 Organisation, strategy and targets

The Faculty of Social and Behavioural Sciences (FSBS) at Utrecht University comprises three departments: Psychology, Education & Pedagogy, and Social Sciences. The Department of Psychology has four sections: (1) Social, Health and Organisational Psychology (SHOP), (2) Experimental Psychology (EP), (3) Developmental Psychology (DP), and (4) Clinical Psychology (CP). It does not have an independent research programme or a scientific director specifically targeted at psychology, because research activities are coordinated across interdisciplinary structures. Specifically, the psychology sections have organised themselves (in close collaboration with Methodology & Statistics, which is situated in the Department of Social Sciences) in a broad research programme ‘Navigating in a Complex World’, consisting of three core themes: (1) Perception and processing of the social and physical environment, (2) Self and social identity in relation to societal engagement, and (3) Regulation of behaviour in response to societal demands and personal goals.

These themes are chosen in line with Utrecht University’s Strategic Themes (Institutions for Open Societies, Dynamics of Youth, Pathways to Sustainability, and Life Sciences) and Focus Areas (e.g., Applied Data Science, Human-centred Artificial Intelligence, Higher Education Research), as well as with the themes of the Sector Plan SSH. The Psychology and Methodology & Statistics sections are also actively involved in the recently initiated national knowledge alliance of Technical University Eindhoven, Wageningen University, Utrecht University and University Medical Centre Utrecht., who are combining their complementary expertise to find solutions for pressing issues regarding health, food, energy, and sustainability. Although this seems a rather complicated structure implying a difficult balancing act, during the interview it turned out that everyone within the organisation seemed happy with it, partly because the staff were involved in selecting the core research themes, and they still had a large degree of autonomy if they wanted it.

The chosen themes also align well with the chosen mission, which was reaffirmed in the FSBS’s most recent Strategic Plan: *‘to use our teaching and research to contribute to a better world by tackling academic challenges in those areas where human behaviour and social dynamics play an important role. Developments in those areas prompt us to conduct socially relevant research that is of a high academic quality.’* Derived from this core mission and in response to the recommendations of the 2017 research review, five strategic aims have been put forward: (1) producing high-quality, wide-ranging, and impactful research (e.g., by enhancing national and international governmental funding, as well as open science), (2) investing in creative and sustainable connections between people and ideas (e.g., by developing new research methods), (3) conducting research that is societally impactful (e.g., by strengthening collaboration with societal partners), (4) cultivating an ecosystem of responsible, motivated, and skilled professionals (e.g., by installing a culture of responsibility and by diversity and talent management), and (5) fostering new generations of applied and fundamental researchers (e.g., by participating in research schools and by coordinating all research masters and PhD programmes in an FSBS Graduate School). To achieve these strategic aims, the psychology sections have initiated various activities and collaborations in the last six years. The Committee appreciates that psychology has chosen the strategic aims in response to the 2017 research review and was impressed by the shared ownership and enthusiasm across all panels that were interviewed. The interviews also allowed the Committee to obtain concrete examples of the large number of activities and collaborations that have been realised to try to achieve these aims.



## 6.2 Research quality

The four psychology sections and the Methodology & Statistics section have provided a highly detailed account of the accomplishments on research quality, subdivided across demonstrable outputs, demonstrable use of outputs, and demonstrable marks of recognition. Regarding demonstrable outputs, the report has mentioned good examples of journal articles in high-impact journals across the three core research themes. Regarding demonstrable use of outputs, bibliometric analysis (which are considered less relevant by Utrecht University itself but still more so by external parties) indicates that Utrecht University is consistently ranked in the top three in the Netherlands in terms of normalised citation impact, number of highly cited papers, etc. Individual researchers have been very successful in obtaining grants from the ERC (three consolidator grants) and from the Dutch NWO Talent Programme (four VENI, four VIDI, one VICI). In addition, three psychology professors have a central role in three different Gravitation programmes (all on themes that are in line with their core themes: mental disorders, adolescent development, and sustainable cooperation). It is also noteworthy that Utrecht University spends great effort to incorporate its research findings and interdisciplinary research attitude into teaching. Finally, regarding demonstrable marks of recognition, several staff members are frequently invited to provide keynote lectures at international scientific conferences and organise symposia at leading conferences. Moreover, several staff members hold positions in the KNAW, the KNAW Young Academy, the NWO Board of Social Sciences and Humanities, and several NWO/ZonMw committees, as well in the editorial boards of important journals in psychology, and methodology and statistics.

## 6.3 Societal relevance

The self-evaluation report has clearly documented the societal relevance across the three core themes and with respect to methodology and statistics. For instance, clear evidence has been provided of input from their research into national policies and strategic areas for societal improvement (e.g., traffic, addiction, evidence-based youth interventions, mental health problems, fairness, and good governance). In addition, Methodology & Statistics is active in research that can improve research quality and societal impact across several domains (e.g., software packages, tutorials, books), not only for academic researchers but also accessible by researchers in professional and governmental settings (e.g., active contributions to the Social Data Science team within ODISSEI, the national research infrastructure for the social sciences). Several staff members have written professional articles in public health and governance outlets and monthly columns for a wide audience in a national newspaper, as well as popular science books. Finally, the case studies that have been included in the report and discussed further during the interviews, provide excellent examples of existing societal impact and potential to enhance societal impact.

## 6.4 Viability

The Committee is largely positive about the viability of the psychological research at Utrecht University. The main argument for this positive evaluation is that the success regarding research quality at the academic level and societal impact is based on strong strategic planning, governance and management, good investments in staff and research facilities, high-level expertise, and flexibility. Concrete examples of these include excellent access to scanning facilities at the University Medical Centre (including child-friendly scanners) and behaviour labs with excellent support staff that are officially organised at the level of FSBS but predominantly used by researchers in psychology. In addition, they have a research support office that is not pushing researchers towards applying for external grants such as the ERC Starting grant but is available with useful information and concrete help for those who want it. In terms



of strategic planning, Utrecht University has a strong vision aimed at interdisciplinary research programmes with great potential for societal relevance and impact, which is likely to put them in an advantageous position in the coming years. On the other hand, this strategy implies a risk that curiosity-driven research becomes less important, that the academic freedom of individual researchers is reduced, and that academic excellence as measured by traditional criteria will be harder to demonstrate. The university has implemented a leadership programme, which is mainly aimed at further development of promising staff at non-senior levels (not just selection but helping them to specify their ambitions and how they can grow into higher-level roles). This seemed to be appreciated by all interviewees for whom the programme was relevant.

### 6.5 PhD policy and programme

PhD candidates in psychology are distributed over several national research schools. The Committee noticed that different departments have different procedures regarding training, but all PhD candidates must at minimum follow an ethics course. The PhD candidates' opinion of research, training, and their well-being is systematically monitored using a survey, as part of the faculty's general Quality Assurance plan. The general conclusion of the survey was that PhD candidates feel at home at Utrecht University. This sentiment was also evident during the interview with the PhD candidates, who appreciate that they have a say in faculty policy through the PhD Council, have a collegial PhD community, and have access to an independent mentor. Generally, the Committee encourages supervisors and management to use the open atmosphere to gain insight into facilities for PhD candidates that prove effective and satisfying.

The PhD candidates valued the freedom to design their research the way they want to. Nevertheless, they noticed that expectations regarding research output remain implicit. The self-evaluation report also mentions that implicit norms may slow down the completion of a PhD trajectory. The Committee advises the faculty to gain further insight into reasons why PhD candidates do not complete their trajectory in the allotted time. In addition, the Committee advises using the yearly evaluations to clarify expectations about research activities and output, and their planning.

### 6.6 Open science

Open Science takes a central position at Utrecht University, with several strong policies and practices regarding Open Access, FAIR data and software, Public Engagement, and Open Education. The report includes convincing data demonstrating the growing trend towards Open Access publications (mainly hybrid and gold). The Faculty Open Science Team (FOST) functions as a link between the faculty and the Utrecht University Open Science Platform. In 2014, FSBS issued a faculty protocol on research data with guidelines for the processing and storing of research data collected by researchers in psychology. Adherence to the protocol is monitored by the Committee on Academic Integrity that performs an annual faculty-wide audit with respect to a sample of published articles and PhD theses, assessing the accessibility and transparency of the underlying data, analytic procedures, and storage. Although this seems quite strict and demanding, in practice it turns out to be more motivating than policing, and more of a competitive advantage than a burden. The YOUth cohort's strong commitment to Open Science principles as well as FAIR and open data (e.g., by written meta-data) has been recognised by being awarded the Dutch Data Prize in 2022. The faculty has recently decided to implement open-source software in methodology and statistics education (e.g., switching from SPSS to R and JASP).



## 6.7 Working environment and personnel policies

### 6.7.1 Academic Culture

A senior staff member has spearheaded the KNAW report ‘Social Safety in Dutch Academia: From Paper to Practice’, which was dedicated to social safety at work and argued for more explicit social norms that are upheld in daily practice through careful monitoring and dialogue. The self-evaluation report has mentioned a breach of these safety norms that led to an investigation and ultimately to the termination of the employment contract of a full professor. When prompted about this during the interviews, the general feeling expressed by the staff was that this case has been handled very well with a clear signal that real sanctions are implemented when needed. More generally, the availability of mentors and confidence officers has worked to effectively reduce the hierarchical barriers to discuss issues regarding social safety, inclusivity, and research integrity more openly.

### 6.7.2 Human Resources Policy

Utrecht University has proactively and enthusiastically endorsed the Recognition & Rewards programme by introducing its own TRIPLE model, which highlights six dimensions of academic performance that academic staff members can excel in: Team, Research, Impact, Professional performance, Leadership, and Education. The basic idea is that every member can define their own profile (within bounds, and together with supervisors and HR colleagues), and work towards achieving their self-defined ambitious goals. One important area in which talent diversification is put into practice is the establishment of teaching-oriented professorships (two successful cases were mentioned along with the procedural details). Specific measures to encourage more diversity at the hiring stage include training of staff to recognise unconscious judgement bias, encouragement to look more broadly at possible candidates, and a first-generation fund (providing a small grant and a mentor to empower early-career scientists). Other aspects of the TRIPLE programme have been mentioned as work in progress.

## 6.8 Conclusions and recommendations

### 6.8.1 Conclusion

In general, the quality of psychological research at Utrecht University is at an exemplary international level as measured by the traditional bibliometric criteria as well as in terms of solid indicators of interdisciplinary team science on coherent research themes with clear societal relevance and impact (e.g., stakeholder involvement, policy making, applications). The management team, as well as the senior and early-career staff, and PhD candidates all seem to share an inspiring enthusiasm towards collaboration, collegial discussions about strategy, management, as well as procedures, open science, Recognition & Rewards, diversity, and inclusion, etc. The positive atmosphere during the interviews suggests a good level of support of the Utrecht University’s vision and goals, which should ensure its future viability.

### 6.8.2 Recommendations

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



- In addition to emphasising coherent research themes that cut across traditional domains of psychology, offer sufficient freedom to individual researchers who wish to pursue their own, more specialised research paths.
- Let excellent curiosity-driven research, which often provides the necessary foundation for future applications, not be hindered by the emphasis on societally relevant research.
- Develop a more systematic quality management approach by unifying the current best practices and making sure that all levels in the organisation are aware of these, instead of the current abundance of procedures, rules and regulations.
- Think more about alternative ways to evaluate research quality to avoid ambiguity among early-career researchers (e.g., by providing clear criteria for tenure and promotion).



## 7. University of Groningen

### 7.1 Organisation, strategy and targets

The Faculty of Behavioural and Social Sciences (BSS) is one out of 11 faculties of the University of Groningen and comprises four departments, with the Department of Psychology being the largest, with about 280 staff members. The research of the Department of Psychology is embedded in the Heymans Institute (HI). The HI is organised into nine research-based units: Clinical and Developmental Neuropsychology, Clinical Psychology and Experimental Psychopathology, Developmental Psychology, Environmental Psychology, Experimental Psychology, Organisational Psychology, Psychometrics & Statistics, Social Psychology, Theory and History of Psychology, and a teaching-based unit. The HI is managed by a research director supported by an Advisory Council consisting of the chairs of the ten units and representatives of several bodies, including the research support department, the Ethics Committee, and the PhD Council.

The HI's mission is to conduct ground-breaking research in psychology, focusing on collaborative projects and society-driven research. HI's vision is that curiosity-driven research in bottom-up collaborations serves as a foundation for a mutually reinforcing relationship between fundamental scientific progress and practical application. The HI's vision shapes its three key targets, which are to have top-tier personnel in all research units, to foster robust collaborations within the institute and with academic partners, and to establish a prominent and visible role in society with demonstrable societal impact. The three key research themes of HI are Understanding Societal Change, Mental Health, and Lifespan Development and Socialisation, which align with the Sector Plan SSH topics of the faculty, which are Mental Health, Societal Transitions and Behavioural Change, and Resilience in Youth.

The HI's strategy, established based on the feedback from the last research review in 2017, focused on Groningen's unique location within the Netherlands, its tradition as a broad, bottom-up organised institute, open science, and PhD policies. More specifically, because the University of Groningen is the only university within a 100 km radius, the HI is faced with a specific set of responsibilities and opportunities, therefore actively encouraging research initiatives with regional partners. HI seeks to hold on to its tradition of being a broad, bottom-up organised institute, covering almost all aspects of psychology, and by doing so, HI goes against the Zeitgeist of more focal areas of expertise.

### 7.2 Research quality

The HI enjoys international recognition for the impressive quality and quantity of its research. The quality is reflected in the concept-weighted citation scores in the 'Psychology Joint Self-Evaluation 2017-2022' and in the field-weighted citation scores in the self-evaluation report, which rose over the years and is now around 2, indicating the HI researchers' work receives twice the citations of the average publication in these fields. The breadth of the research quality ('in all research units') is evidenced by the reported top 15 most influential papers which span (nearly) all the research-based units, by the benchmark on the core 27 Elsevier Area Topics, and by the fact that the HI's Top 27 research topics account for roughly 23% of HI's output. Additionally, the self-evaluation report highlights the number of co-supervised PhD candidates, by both international colleagues and colleagues from other departments or other universities, as an indicator of strong collaborations. A distinctive aspect of the unit's research programme is the prominence (and success) of the work on environmental psychology, including the work on 'psychological impact of induced earthquakes', which further strengthens the claim of being visible regarding societally relevant issues. Research grants awarded also testify to the high quality of



the unit's research. There is a good mix and rising amount of personal grants and consortium grants, including being core-applicant in a newly funded NWO Gravitation award, although ERC grants are missing.

### 7.3 Societal relevance

Conducting research that is relevant to society is a core part of HI's mission. HI researchers have an impact on education, psychological testing, clinical practice, development of treatment protocols, reflection on science, and policy and organisational advice, in each case reaching a wide audience. As evidenced by the self-evaluation report, many HI researchers play an active part in society through various roles, including part-time employment by mental health care institutions and membership of bodies such as the IPCC (Intergovernmental Panel on Climate Change). More specifically, the Clinical Psychology group produces work that shapes national guidelines, staff from across the unit disseminate their work through media appearances, and some public outreach research initiatives (e.g., 'How nuts are the Dutch') are internationally known. There are also several endowed professorships, reflecting collaboration with external organisations. The Environmental Psychology Group and the Social Psychology Group have conducted extensive applied research projects funded by national or regional governments.

Other examples of how HI's research tends to have a high societal impact are (a) awards for exceptional success in knowledge exchange and impact on society, (b) numerous popular science books in Dutch, German and English, some of which have won book prizes, (c) HI's highly frequented institutional blog *Mindwise*, (d) active involvement with regional and national newspapers (*Dagblad van het Noorden*, *De Volkskrant*), and (e) specific local involvements, such as a collaboration with the regional football team FC Groningen for research on talent development, or research with the province of Friesland on road safety. Overall, these involvements have had an impact on policy and practice, including the willingness of various societal parties to provide funding.

The joint self-evaluation report shows that the unit's work has achieved a reasonable level of visibility, with mentions in newspapers or policy documents. This could be further enhanced by its geographical uniqueness, which offers opportunities and responsibilities. As of 2019, the University of Groningen has joined forces with higher education institutions and industry in the three northern provinces, investing heavily in its regional function under the label 'University of the North'. HI's expertise in climate change and crisis and disaster management should meet the growing societal demand for these issues.

### 7.4 Viability

The HI reports five strategic ambitions: education is leading, thematic profile building, greater attention to interaction with society, excellent quality assurance and professional development, and proper use of people and resources and well-developed governance. Thematic profiling in this case is a combination of striving for excellence in all areas of psychological research and its thematic profiling of the Faculty of Behavioural and Social Sciences and the Sector Plan SSH, namely: societal and individual resilience. However, as reported in the SWOT analysis, it is not always easy to deal with nine research units of quite different sizes. In the ambition to pay more attention to the interaction with society, progress has already been made in recent years and will certainly be further developed in the future, given the research foci of the HI, its strategic alliances, its unique position as part of the 'University of the North', the increased attention of the faculty to training staff in public engagement, etc.

In terms of excellence in quality assurance and professional development, the HI reports a new professional development policy that will be aligned with the university's Recognition & Rewards policy.





The ambition to put new policies in place is of great urgency and importance, particularly in light of reported threats and weaknesses, such as the cessation of hiring new staff on tenure-track contracts by default, the reported sense of inequality between tenure-track and non-tenure-track staff, and the very large number of associate professors in some research units, which hampers the prospects of young talent.

The last ambition, which is ‘the proper use of people and resources and well-developed governance’, will be implemented by streamlining the vision of the HI and making responsibilities and roles transparent for academic staff, support staff and administrative staff, and (research) students. Again, this is a well-chosen ambition, given the work pressure in Dutch academia, the number and variable size of HI’s research-based units, the reported increased bureaucratic burden, and the challenging competition of many NWO/ERC calls.

The Committee has identified several issues that need attention. First, the division of the institute into nine research units of varying sizes is seen as a hindrance to effective governance, leading to increased bureaucracy and complicating decision-making and transparency. Similar to the previous review Committee, the current Committee also considers the large number of units problematic and recommends combining or restructuring units where feasible. This should be accompanied by active leadership from the faculty’s management, transparency of the process, and active participation and involvement of all groups. Another related issue, raised by several individuals the Committee spoke to, was the request to make rules and expectations more explicit. This refers, for instance, to the expectations of supervisors regarding what is required (or even what is too much) for a PhD thesis, what kind of support PhD candidates should expect from their supervisors, what is expected from assistant professors, etc.

Second, as the Committee perceived it, the HI has set up a system, in which financial (temporal) weaknesses of units are compensated by others and in which all members must contribute (e.g., by having a minimal teaching load). Overall, this created a strong belonging to the HI, which could be termed a social safety net. However, a disadvantage is that staff members may feel that efforts beyond a certain threshold are not adequately rewarded. The Committee recommends exploring ways to maintain the social safety net, but at the same time implementing improved mechanisms to recognise and reward outstanding performance. Additionally, the Committee recommends seeking ways to reduce the administrative workload at the levels of full, associate, and assistant professors. Some ideas proposed during discussions with the groups from HI include hiring additional staff for a post-award funding office, the legal office, and the ethical committee.

Third, the SWOT analysis states: ‘The decision to stop hiring new staff on a tenure-track contract by default causes feelings of inequality (weakness)’ and ‘The tenure track system caused several units to have a relatively large number of associate/full professors. This hampers the perspective of young talent at the HI (threat)’. This issue was reiterated in several groups during the interviews, with some young talents clearly stating strong discomfort regarding their career perspectives. In the Committee's view, there is an urgency to discuss this issue in a transparent way within the institute.

## 7.5 PhD policy and programme

All PhD candidates have access to training regardless of their contract status, which is formalised in their Training and Supervision Plan. The training is set up differently in each unit, ranging from a personalised plan to a uniform 30 ECTS programme. The embedding of PhD training was highlighted by the Committee of the 2017 research review. The current review and interviews suggest that access to content-related and specialised skills training has improved. PhD candidates are strongly encouraged to



join a relevant research school. Nearly all do: out of all 92 internal PhD candidates that started in the evaluation period, 87 joined a research school.

The current HI policy creates a suitable PhD trajectory for most. Nevertheless, the differences between units and PhD candidates can make it challenging to gain insight into opportunities and general procedures. Despite this observation, the Committee noted that PhD candidates were positive about their PhD trajectory and felt encouraged in their collaborations between units. They also demonstrated a strong awareness of open science practices, which were embedded in their daily research practice.

PhD candidates and senior staff noticed that the COVID-19 pandemic impacted PhD research in multiple ways. Naturally, lockdowns reduced contact with patients and subjects. Moreover, general motivation among PhD candidates decreased. Senior staff highlighted these reasons as causes for delays in finishing the PhD trajectory within the allotted time but noted that the reasons for delays are not always clear. The Committee advises management and senior staff to use the available resources (surveys, PhD council) to gain insight into the reason behind these delays and decide whether policy adjustments are necessary to be more proactive. A general policy may be harder to establish due to the variation between units.

Finally, the interviewed PhD candidates observed that the handling of (mental) well-being depends on the supervisory team. The PhD candidates were aware of many initiatives that have been put into place regarding social safety and well-being, but the Committee noted that the PhD candidate often must take the initiative. The Committee agrees with the faculty's SWOT analysis that achieving a healthy workload is a huge challenge, but the Committee nevertheless encourages the faculty management to create a healthy workplace by design, by incorporating a structure that adjusts to an individual's personal well-being.

## 7.6 Open science

In the previous research review, it was acknowledged that the Psychometrics & Statistics unit had contributed to a better use of statistics and psychometrics in the HI's research. However, it was noted that the HI was not at the forefront of promoting responsible research practices. Since then, several measures have been taken. For instance, in 2021, BSS established an Open Science Committee, which closely collaborates with the university-wide Open Science programme. In 2022, a Data Policy working group has been formed to ensure compliance with the BSS Data Management Protocol. The Data Policy working group also advises the faculty on monitoring, training, open education, and best practices in the field of open science. In addition, the faculty is working towards a single IT platform for ethics, data management and data storage.

The visibility of HI in Open Science has significantly increased, for example, evidenced by a NWO Vidi Grant 'Solving the Reproducibility Crisis in Biomedicine' and their core (Elsevier) Area Topics 'Reproducibility and Open Science' having a prominence percentile of 99. Open access publications have risen to nearly 100%. The self-evaluation report gave the impression that open science measures are voluntary and not strongly reinforced by the management. However, talking to several levels of research staff suggested that Open Science is already widely practised at HI.



## 7.7 Working environment and personnel policies

### 7.7.1 Academic Culture

Based on the self-evaluation report, the HI directly states that a healthy workplace is valued more highly than short-term research outputs and that research is a collaborative endeavour, with all members, academic staff, support staff and administrative staff, and (research) students, having their own responsibilities and roles. Furthermore, the self-evaluation report explicitly endorses principles of inclusivity and integrity, and there are measures like the 'Corporate Academy' that offer training in inclusivity and diversity.

### 7.7.2 Human Resources Policy

The self-evaluation report states that the HI values an inclusive international research environment. Several measures are in place to ensure this aim, such as the Recruitment Guide which informs the members about an open, transparent, and merit-based recruitment and selection procedure and provides guidance on the different steps of the process.

As a result, the University of Groningen has been awarded the HR Excellence in Research logo by the European Commission, which demonstrates that the University is committed to these principles (open recruitment, attractive working environment, mobility, and career opportunities) and is continuously working to improve and implement them. Much attention is given to gender diversity in senior positions (e.g., in 2022, seven full professors were female, eight were male). There is also a good degree of international diversity, with a high proportion of staff at the level of assistant professor (34%), associate professor (24%) and full professor (20%) having an international background.

In addition, the self-evaluation report states that the faculty is currently developing a new policy on professional development in close collaboration with the units. This policy will be aligned with the University's policy with respect to the Recognition & Rewards programme. This is commendable, as the removal of the default tenure-track mode in 2020 seemed to have caused friction and uncertainty for assistant professors hired outside the tenure-track programme.

## 7.8 Conclusions and recommendations

### 7.8.1 Conclusion

The HI is internationally recognised for the quality and quantity of its research. The institute's impactful research not only enhances its global visibility but also leads to the acquisition of substantial research grants. The institute's research is of considerable societal importance, underpinned by its profound contributions to various domains, proactive engagement in societal issues, and its clear impact on shaping policies and practical applications.

Based on the outlined strategic ambitions, the HI demonstrates a forward-looking strategy, emphasising the primacy of education, thematic profile building, enhanced engagement with society, a commitment to excellence in quality assurance and professional development, and a focus on efficient resource utilisation and transparent governance, suggesting a viable and well-prepared path for its future development.

The Committee has identified several issues that need attention. The main issues revolve around the complex structure of the nine research units hindering effective governance, the demand for clearer



rules and expectations, especially regarding PhD theses and support for PhD candidates, and the impact of discontinuing default tenure track contracts on the career prospects of young talent.

### *7.8.2 Recommendations*

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

- Restructure the units, limiting the number of units and levelling their size, with active leadership from management, transparency, and the involvement of all groups.
- Make (implicit) expectations on career development more explicit.
- Try to systematically reduce administrative and unreasonable teaching-burden for assistant/associate and full professors, for example, by hiring additional staff for supporting applications for research funding, the legal office, and the ethical committee.
- Work on solutions for the (perceived) limited career perspective of assistant professors.



## 8. Leiden University

### 8.1 Organisation, strategy and targets

The Institute of Psychology at Leiden University aims to conduct leading research and education in psychology and related fields, and to create a positive impact on society. Psychology at Leiden is a relatively large unit. Psychology is part of the larger Faculty of Social and Behavioural Sciences. Research is organised in six units: Clinical Psychology, Cognitive Psychology, Developmental and Educational Psychology, Health, Medical, and Neuropsychology, Methodology and Statistics, and Social, Economic, and Organisational Psychology. The six units are further organised through four cross-cutting topical themes: 'Advanced Behavioural Research Methods', 'Development and Learning', 'Health and Well-being', and 'Social, Cognitive, Affective Decision-Making'.

To achieve its ambitions, the institute has been working on further strengthening its research infrastructure and investing in advanced methods. It continues to promote cross-disciplinary work with high translational value through research programmes at Leiden University and the broader alliance of Leiden-Delft-Rotterdam (LDE) Universities and the Medical Delta networks. The institute explicitly views knowledge utilisation as a two-way street, in which its fundamental research is translated into societal applications that, in turn, generate new ideas for its fundamental research.

The new strategy of the institute focuses particularly on bringing the institute together by prioritising team science, interdisciplinarity, Open Science, Recognition & Rewards, translational research and education, and PhD policy. To facilitate these developments, the institute has adopted a novel governance model based on the notion of diversification of tasks and roles, and shared responsibility. As an effect of this new governance structure, more diverse staff now take up managerial and coordination research tasks. This 'shared-responsibility governance model' provides leadership opportunities and roles for more researchers than previously. For example, the institute's central board now has members each responsible for one managerial task, such as a member responsible for oversight of research strategy, a member for science operations, a member for education, etc. This new layer of management allows leaders of research units more time and energy for strategic research planning.

### 8.2 Research quality

The Institute of Psychology has multiple recognisable, well-structured, original, and highly visible research units, all of which exploit diverse methods and scientific approaches. Research leaders have good reputations in their fields, many at the international level of visibility. The research units have for some years been highly autonomous, led by excellent research leaders, with budgets earmarked for the unit, and a good deal of control over their specific scientific programme aims.

The physical infrastructure for research is excellent, partly due to support through the partial beta-funding (i.e., partially comparable to funding of natural sciences research). Within each research unit, several staff members have been successful in attracting significant research funding from NWO and/or the ERC, creating an outstanding grant acquisition record. Highly prestigious science awards such as Spinoza or Gravitation indicate that many research teams compete at an outstanding level. Other teams and individuals are opting to move away from working toward traditional indicators of research quality, such as citation metrics. Now, some staff lean toward societally relevant research while others lean toward fundamental research, and this is working, in keeping with the emphasis on academic freedom that has long been a flagship strength of the Leiden Institute of Psychology.



The quantitative analysis provided to the Committee in the ‘Psychology Joint Self-Evaluation 2017-2022’ indicates that, in terms of citations (normalised by content area), Leiden's performance falls close to the median among Dutch departments. The interviews did not provide additional evidence about the status of the research quality compared to the situation six years ago. It is unclear what exactly the research contribution is in terms of scientific achievement to the body of scientific knowledge. However, it is important to note that Dutch universities, on average, exceed the international benchmark with respect to citations and impact in this regard. Thus, the quality of research in Dutch psychology remains very high, and Leiden's research quality is in line with other Dutch institutions.

### 8.3 Societal relevance

The institute demonstrates excellent relevance to society. A deliberate strategy is in place, and the self-evaluation report explicitly articulated a ‘two-way street’ in which fundamental research findings are translated to societal applications, which in turn generate new questions for research. Convincing examples were given that corroborate the focus on contributing to society. The Institute’s awareness of the importance of societally relevant research is evident at all levels of staff. The translational work is supported by clear and concrete indicators such as several special chairs, citizen-science projects, labs in the field, and public-private partnerships. At least four centres are in place that provide ‘knowledge and expertise’ in mental health treatment, adolescent stress, economic behaviour, and healthy society. Relevant products include digital screening instruments, treatment manuals, interventions, diagnostic tools, and policy-reports. Public outreach is stimulated in various ways, for example, by media and websites, lectures, interventions, open access science and best-selling books to inform the public on psychological themes. Finally, the institute reported contract grants for translational research, which shows positive peer-review recognition of the societally relevant work planned in future years.

### 8.4 Viability

Overall, the institute has extremely good researchers, both junior and senior. It also has an impressive track record of external funding and excellent well-resourced research teams and facilities. The institute has a balanced portfolio of grant-based funding, contract funding, funding that flows from student numbers, and direct funding for facilities and infrastructures.

Staff expertise is strong, researchers are successful at all career stages and the current hiring policy is impressive. There is a strategic investment in star early-career researchers who are highly productive. Morale is high at all levels of staff, including PhD students, which is a good sign for viability.

The institute provides excellent research infrastructure and experimental laboratories for research at many different levels of analysis, from the most basic biological analysis to the social-group interaction level of analysis. There is a very good balance between fundamental versus applied research. The institute’s collaboration with Leiden University Medical Centre in health/clinical psychology research and in neuroscience is a real strength.

Research resources were a strength in the past, and recently the institute has expanded its physical resources even further, with new space, offices, expanded labs for psychophysiology and decision-making research, and updated computing facilities to handle large-scale datasets. The institute is well-resourced, and therefore it is able to attract high-quality talent, from the early-career level to the professorial level.

The institute faces some challenges to viability, but leadership seems well-placed to address these in the near future. The SWOT analysis identified communication flow within the institute as an area in need of



improvement. This weakness might interfere with the success of the new governance structure in which diverse staff now take on managerial and coordination tasks. However, awareness of this potential problem area signals that the institute management will address communication infrastructure and processes. The upcoming move to centralised lab space, shared with other institutes and departments could prove disruptive and costly. Nevertheless, staff are excited about the move to new labs, moreover awareness and definition of this emerging problem area signals that the institute management will be able to manage the change successfully. The self-evaluation report described an initiative now underway to work on specific areas that need attention: ‘one institute’, Recognition & Rewards, open science, interdisciplinarity, and translation. Leadership’s plan to bring these initiatives to completion in the next 3-5 years is commended. The 2017 report observed that the institute sometimes struggled to retain excellent researchers, because the system for promotion to associate professor and full professor was underdeveloped. The interview with the Committee reassured us that there can now be promotion to associate professor based on strong performance in different areas; teaching, social impact, fundamental knowledge contribution.

A potential threat to viability is that funding for the Leiden Institute for Brain and Cognition neuroimaging facilities is uncertain. Researchers are now being charged more for MRI scans per participant, while the field standard has shifted to require larger samples with more participants than in the past. In addition, the MRI scanner is ageing and will need to be replaced in three to four years. Investment will include not only the MRI scanner but must maintain the essential expert neuroimaging staff of the facility as well. Affordable scanning in a scanner that meets modern standards in the field is a critical resource for a large proportion of the researchers in the institute, and for Gravitation awards. The scanner alone is insufficient, as it must be accompanied by staff who provide expertise in use of the technology. The unresolved uncertainty surrounding the availability of this facility needs to be addressed promptly. Delaying a resolution could potentially lead to researchers who rely on MRI technology placing their work at risk and considering the possibility of leaving Leiden. The extent to which this uncertainty might impact the institute’s research sustainability remains uncertain at this point.

Overall, the institute has a strong future outlook. It should be very strongly supported by the faculty and university.

### 8.5 PhD student policy and programme

All PhD candidates are enrolled in the Graduate School of the Faculty of Social and Behavioural Sciences. They create their own personalised training programme under the guidance of their supervision team, of which 5 ECTS are reserved for academic activities and 5 ECTS are reserved for courses on transferable skills.

The Committee of the 2017 research review report suggested to introduce a tighter progression monitoring system. Since then, the graduate school has adjusted their programme to support PhD candidates better in their PhD trajectory and well-being. For example, a PhD’s individualised Training and Supervision Plan is used as a ‘living document’ during the yearly evaluation meetings and adjusted if needed.

The interviewed senior staff and PhD candidates were generally happy with the PhD training (with the sidenote that courses seem mostly internally focused) and the working environment. The PhD candidates liked clarity about what is expected from them to gain a PhD degree, especially in terms of activities and output. The novel approach to the Training and Supervision Plan seems a great start. The graduate school could use their well-established contact with PhD candidates to improve



communication with specific groups, such as non-employed PhD candidates. The Committee noticed differences between employed PhD candidates and PhD candidates who perform their activities under other contract forms, such as their onboarding process, communication, and structure of the PhD programme. The Committee advises to ensure that an individual's form of contract does not come at the cost of opportunities and, as a result, outcomes.

The self-evaluation report explains that the initiatives mentioned have been implemented with the intention to reduce the percentage of PhD candidates who do not finish within the allotted contract time. The senior staff mentioned ambitious PhD candidates as one of the contributing factors to this delay. The interviewed PhD candidates also noted that balancing teaching duties with their research activities is challenging. They appreciated the extensive opportunities for teaching and course development but mentioned that the preparation time needed for these activities depends on the course coordinator rather than the PhD supervisor. The faculty could offer centralised guidance to first-time teachers, regardless of their status.

## 8.6 Open science

Dutch psychology is among the leading actors in the world in adopting principles of open science, and Leiden is among the Dutch psychology groups in this endeavour. For example, more than 90% of the institute's publications have been open access in recent years. The 'advanced behavioural and research methods' unit in the institute not only serves the function of supporting statistical analysis of data, but importantly it also works to make Leiden's research transparent, reliable, reproducible, replicable, and otherwise robust. Clear responsibility for promoting and educating institute researchers about open science is ascribed to this unit, and there are two data stewards in the institute to ensure datasets are curated, documented, stored, and accessible. The institute has strong ties to external open-science organisations.

## 8.7 Working environment and personnel policies

### 8.7.1 Academic Culture

The Psychology Institute at Leiden University complies with the APA Ethics Code, the Netherlands Code of Conduct and the university's integrity guidelines. Committees that safeguard academic integrity and ethics are in place at the university and institute level. Dissemination of information about reproducibility of research results, preregistration, and data management plans, has had a clear effect on the daily research practice at the institute. Students take compulsory data management training. Scientific integrity is a part of the research culture at PhD level, and above. A recent integrity breach stimulated new developments to raise the visibility of ethics and integrity in the institute. For example, data storage, data sharing, linking ethics applications with pre-registration plans, have come to maturity, culminating in an innovative 'publication package.' The self-evaluation reports initiatives intended to enhance academic culture. For example, there is a move toward a new Recognition & Rewards system that is shifting assessment toward the goals of the individual staff member, and there are also initiatives to reduce administrative workload.

### 8.7.2 Human Resources Policy

Staff at all levels are proud to be at the Leiden institute. Recognition & Rewards is the new HR policy. The Committee noticed that staff have very different conceptions of what 'Recognition & Rewards'





means for them personally, and there are also widely varying expectations between individuals about career progression for early-career research staff. There is a current perception that it is not clear what early-career researchers must do to complete the PhD or to earn promotion to associate professor. Many staff reported that criteria and expectations are in flux and malleable, and transparent guidelines with respect to these issues but also outlining the limitations of the organisation's hiring possibilities would be beneficial.

Due to the implementation of the new governance structure, a more diverse group of staff members has taken on managerial and research coordination roles, resulting in greater diversity within the management teams. For instance, the Institute Board now includes two female and two male directors, with an equal split between full professors and associate professors. Likewise, in the daily boards of the units a diverse team (again evenly balanced across genders) of full, associate, and assistant professors hold coordinating roles.

## 8.8 Conclusions and recommendations

### 8.8.1 Conclusion

The research output and scientific impact of the Institute of Psychology at Leiden University is exemplary. This is evidenced by the internationally visible academic reputation of many of the researchers, numerous prestigious national and international prizes, and the value of research grants and individual fellowships acquired. The unit's research is technologically and methodologically innovative, and it investigates topic areas and questions that are significant and cutting-edge in the field. The Institute's excellent relevance to society is amply attested to by its articulated strategy of a 'two-way street' between researchers and societal partners. There is active outreach to the public, extensive connections with international and social organisations, citizen science through the Lab on Wheels, and contract funding for applied research.

Research infrastructure is excellent and potentially slated to improve with the eventual new lab developments, and this emphasis on a rich resource will likely ensure the continuation of the high level of research quality in the years to come.

The departments' viability can be excellent, based on the new approach to management, the steady flow of external funding, the high quality of the research staff, and the very impressive and well-resourced research facilities. However, the uncertain status of the MRI neuroimaging facility is a major threat to viability.

### 8.8.2 Recommendations

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

- Maintain the balance between (a) research that aims for societal relevance with important local impact/recognition and (b) research that aims for internationally visible knowledge production and brings citation and recognition by international peers. This balance will have implications for the institute's reputation inside and outside the Netherlands, affecting resource competition in the broader field.
- Carry out formal analyses to determine the actual and true costs of the institute's research activities, to inform appropriate budget requests in funding applications.
- Provide more formal guidance, training, and feedback to prepare PhD students for teaching.
- Ensure, as far as is practically possible, that a PhD candidate's form of contract does not hinder opportunities and research outcomes.



- Craft guidelines/definitions for policies and ensure that these are communicated to all staff and students as appropriate, to achieve a uniformly shared transparent understanding of the policies such as 'Recognition & Rewards' and career progression but also the limitations to the organisation's hiring possibilities.
- Build in formal empirical valuation plans for new policies, practices, research endeavours, and initiatives, including 'Recognition & Rewards' and the institute's new governance structure. Collect data on the outcomes to anticipate unintended consequences and foster a culture of quantitative self-study evaluation.
- Address the uncertain status of the MRI scanning facility as soon as is feasible, due to its critical role in psychology at Leiden, impacting staff recruitment, retention, and funded research.



## 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.



## 10. Erasmus University Rotterdam

### 10.1 Organisation, strategy and targets

The Psychology Research Programme at Erasmus University Rotterdam is embedded in the Department of Psychology, Education Sciences and Family Studies (DPECS) at the Erasmus School of Social and Behavioural Sciences (ESSB). The research is supported by the Erasmus Behavioural Lab, giving access to a variety of research methods and techniques.

The overarching research strategy is summarised as ‘From Lab to Society’ and emphasises the application and practical usability of research. Seven strategic goals were relevant in the assessment period: increase external funding; increase proportion of female professors and associate professors; increase valorisation efforts; improve talent management (start a research master’s programme); monitor PhD candidates more closely; maintain and update the Erasmus Behavioural Lab; and increase open science. The research is organised into five groups: brain and cognition; clinical, educational; organisational, and research methods.

Through the self-evaluation report, the programme shows that it has taken on board previous SEP recommendations. Accordingly, the existing strong overarching theme of ‘From Lab to Society’ has been further developed. There is a wide range of research across key themes in psychology, with a strong focus on societal domains (family, education, development) and expertise in field research. The Department has shifted its focus from being primarily a teaching unit to a teaching and research unit and this process is still ongoing, with changes continuing to bed in during the period under review.

### 10.2 Research quality

The self-evaluation report shows strong evidence of original ideas and research approaches. Regarding the quality of the publications, the citation data in the unit’s self-evaluation report show that these have a good academic impact, and the number of publications has risen steadily during the review period. There is a good spread of output according to their size across the research themes. The ‘tailored’ citation analysis suggests that in its selected set of research topics, the unit performs very well, with only Harvard publishing more papers on these topics, but with a lower citation impact. The citation data in the national joint self-evaluation report suggests that the programme’s work is highly cited. There is strong evidence of the international reputation of individual faculty; overall, international benchmarking demonstrates an impressive quality of research activity.

Judged against the seven strategic goals mentioned above, the programme is performing well. The goals have been achieved regarding increasing the proportion of female professors and associate professors; increasing valorisation efforts; closer monitoring of PhD candidates; maintaining and updating the behavioural lab; and improving open science practice. The evidence is less compelling for the goal of increasing external funding. Total research income has not markedly increased during the assessment period. Also, the goal of improving talent management by introducing a research master's programme has not been achieved due to doubts about its financial viability.

### 10.3 Societal relevance

The self-evaluation report provides evidence of activity in policy-making, particularly in education. The case studies elaborate on the provision and outcomes of masterclasses, workshops and webinars



provided. This activity links directly with national and international reputation and visibility (media appearances, etc.). It seems that excellent work is being done with societal partners, while the document clearly articulates the societal relevance of research during the COVID-19 pandemic.

The national joint self-evaluation report shows that the unit's work has a relatively low number of mentions in the news and that the number of mentions of its work in policy documents is also relatively modest. A discussion of this point during the interviews indicated that this may be a consequence of the relatively small size of the unit and that some activity at the municipal level may not be captured within the national document.

During the interviews, some staff members expressed the opinion that 'impact' is difficult to measure and that a focus on applied research may possibly constrain freedom of research, and force alignment of individual researchers with the dedicated sector themes (although this has not materialised and respect for academic freedom within EUR is noted). An Evaluation Societal Impact (ESI) team has been established at the university level to measure social impact and the psychology unit has recently joined this initiative. This should enable an appropriate methodology and a set of criteria for measuring impact to be developed, which may mitigate some of the fears expressed.

#### 10.4 Viability

The self-evaluation report focuses on the challenge presented by shifting from an education-based unit to one that is also research-based. It notes the increase in contract funding and the way in which the Sector Plan SSH has benefitted the unit, especially in providing funding to hire new staff. It also acknowledges that it will be challenging to generate the required level of funding in the future, due to high competition for the limited number of grants and the threat of national policy to limit the number of international students. The future research strategy outlined in the self-evaluation report shows that the unit is aware of the need to further improve its performance in certain domains, especially with respect to research income. The steps identified seem sensible and achievable, for example, increased participation of researchers in consortium grants and active participation in strategic initiatives launched by the university on societal impact.

In support of the shift in focus from education to research, the Committee was pleased to see that new support services were put in place for researchers to enable them to write grants and to manage projects. This includes the development of a one-stop research 'shop' where researchers can get support for the whole research trajectory pre-, during- and post-award. A mentoring programme has been started to support younger talent to submit grants. In particular senior staff have hailed the culture change of increased support for writing funding applications. This has resulted in recent grant successes that are not covered by this assessment period, showing that the unit is still in a transition phase.

There has been a focus on fostering team science, with teams working together on individual grants related to the Sector Plan SSH themes. This involves combining researchers with different expertise and seniority levels which has the additional benefit of enabling training and career development of junior staff. It must be noted that, in common with other universities, some researchers do not fit within the chosen SSH themes. Although researchers are encouraged to connect to the focus themes, academic freedom of individual researchers is respected, and those researchers are encouraged to make research connections with others working on cognate research themes across other departments or other universities. It is also hoped that the assistant professors directly connected to the Sector Plan SSH themes will serve to bridge research themes across the Department.





The absence of a research master's programme denies the unit the opportunity to train its own PhD students. As a result, the best students who are interested in pursuing a research master's programme are being lost to other universities. Staff at all levels are strongly in support of the development of a research master's programme. While this may require additional staff, the curriculum revision of the bachelor's programme may yield some opportunities that would facilitate the development of a research master's programme.

While the number of PhD candidates is relatively low by national standards, the recent investment in research support may address this issue by increasing the faculty's success rate in obtaining external funding. The opportunities for early-career academics to supervise PhD candidates are mixed and need attention. Mentorship by senior academics and PhD starter grants would be useful here.

Overall, staff were complimentary about the equipment and infrastructure available to support research. In addition to the research support mentioned above, this includes in-house research equipment available in the Erasmus Behavioural Lab and access to imaging infrastructure based in hospitals.

The SWOT analysis identifies the absence of a dedicated team for methods and statistics support as a weakness. The Committee advises fostering a culture of active collaboration and partnership with colleagues who possess expertise in these areas, emphasising the promotion of such expertise as a collaborative effort rather than considering it merely a service unit.

### 10.5 PhD policy and programme

All PhD candidates are embedded in the Erasmus Graduate School of Social Sciences and the Humanities, and each candidate designs their own training programme. The Committee noted variations in activities and obligations among the interviewed PhD candidates. For example, Training and Supervision Plans were freeform and teaching load is not standardised. This is not an immediate reason for concern, because PhD candidates seem to be able to successfully navigate their way in the Department. The interviewed PhD candidates particularly highlighted a specific staff member who helps to structure their trajectory. The Department could support this by offering better communication and more structure to PhD candidates by default. In the interests of equality, it is an important principle that PhD candidates should receive equal opportunities regardless of form of contract and supervision team. The Committee encourages the Department to carefully consider the balance between offering freedom and ensuring equal support and opportunities for all PhD candidates.

The interviewed PhD candidates were well-versed in open science practices, such as preregistration. They can access courses and support staff, such as their Privacy Officer. However, they wished that their supervisory team would be better informed about open science practices and opportunities at Erasmus University Rotterdam. The Committee also noticed that most open science initiatives mentioned in the self-evaluation report appear to be aimed at PhD candidates and early-career researchers but not at associate and full professors.

The 2017 research review Committee advised to introduce PhD representatives and the Committee is pleased to see that this advice has been followed. The interviewed PhD candidates acknowledged the benefits of this strategy, such as informal support and a sense of community. Further support is available from an HR ombudsperson and a confidential advisor at Departmental level in case of escalation, but the interviewed PhD candidates would like a more direct route to confidential advisors or specific PhD advisors at the Departmental level.



## 10.6 Open science

There are robust open science policies in place and training opportunities are available to researchers to promote open science policies and to facilitate compliance with the FAIR principles. Data stewards and legal experts are also available to assist researchers. Open science practices are well embedded among the PhD candidates and younger academic staff, but senior staff may need better training in practices such as pre-registration. At present, compliance with open science policies is voluntary, with slow progress towards making this mandatory. A cultural change will be necessary, and this is being promoted at the university level through the identification of open science ambassadors in individual departments and at the faculty level. Additionally, team leaders are required to describe their open science activities. The one-stop research shop should be used to maximum effect here.

## 10.7 Working environment and personnel policies

### 10.7.1 Academic Culture

The self-evaluation report describes an academic culture that values openness and integrity. Procedures for gaining ethical approval and for managing data are outlined, along with training in responsible scientific practices.

The team science approach is working well and has broad support across the staff cohorts. It was encouraging to hear that team lead positions were applied for competitively and it was clear that those in post really want to be there, which is excellent for team spirit and for maintaining momentum to drive research forward.

The Committee noted that newly appointed assistant professors have had opportunities to benefit from the structural and policy changes introduced over the timeframe of the present review. Care must be taken to ensure those who were already in post while these changes have been implemented are not disadvantaged but are also able to avail themselves of opportunities to participate in research, supervise PhDs and plan career development. Training in PhD supervision should be available for all. Academic freedom appears to be maintained within the team science approach, with researchers having the opportunity to pursue their own interests.

There are notable initiatives in place to facilitate discussions on academic culture and social safety, such as a play performance, although awareness of these initiatives varies across groups. Overall, the Committee's impression is that the workplace is generally considered a safe environment, and staff are aware of how to access support should any issues arise.

### 10.7.2 Human Resources Policy

There is a clear policy regarding diversity, with the explicit aim of increasing gender diversity among senior staff. Moreover, there is a diversity officer and an HR support worker who checks for inclusivity in recruitment practices, and there was a sense from the staff and the PhD candidates that diversity was valued and encouraged. Gender balance within the unit is excellent and has improved since the last assessment period. The Committee was impressed to see mention of diversity beyond gender diversity, including cultural and socioeconomic diversity.

A diversification of promotion pathways has been introduced. Education, research, societal impact and management profiles and pathways were implemented in 2020/2021, and the future plans state that 'we will further invest in different career pathways and pay attention to developing teams with diverse, but complementary profiles'. Coaching and mentoring for career development is available.



While senior management believed that there was a culture of openness and transparency around opportunities for career progression, this view was not always shared by other staff. All early-career staff agreed that the promotion guidelines are not transparent and that clear and objective criteria would help with managing expectations and with overall career planning and development.

Some of the uncertainty around promotion was directly related to opportunities for participation in research. There is a sense that there is support and encouragement for writing grants, but that teaching and administrative duties (e.g., involvement in curriculum reform) limit the time available for this.

## 10.8 Conclusions and recommendations

### 10.8.1 Conclusion

Psychology at Erasmus University Rotterdam is continuing to perform well in research in the context of a strong educational focus at university level. The unit is transitioning from a primarily teaching-focused to a balanced teaching and research activity approach, necessitating ongoing effort and resources. This review occurs at a relatively early stage in this evolution, and the Committee believes that the outcomes of these changes will be better assessed during the next period of self-evaluation and review. The team science approach has been well-received and embraced by staff and is beginning to bear fruit.

### 10.8.2 Recommendations

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

- Provide appropriate support to enable implementation of the plans to support the continuing shift towards an increase in research activity.
- Pay more attention to the career development of early-career academics, particularly regarding opportunities for PhD supervision, and provide clarity on the criteria for progression within the Recognition & Rewards programme.
- Ensure that staff are not shoehorned into research themes but continue to have the opportunity to follow their own research interests and areas of excellence.
- While excellent open science policies are in place, the faculty should move towards mandating such practices rather than keeping them as a voluntary activity. In particular, effort should be made to ensure all staff, especially PhD supervisors, have adequate training in the implementation of open science practices.
- Organise methods and statistics support in a different way. A culture of active collaboration and partnership with those colleagues having expertise in these areas should be encouraged, rather than viewing this expertise as a service unit.
- Ensure that support for PhD candidates is as far as possible equal, regardless of the nature of their contract.
- Establish a research master's programme.



## Appendix A - Programme of the site visit

### Monday October 9

Time	Part
09:00 - 11:30	Preparatory meeting committee
11.30 - 12:30	Presentation Dashboard: overarching research output analysis
12.30 - 13.30	lunch
<b>Vrije Universiteit Amsterdam</b>	
13:30 - 14:00	committee preparation programme 1
14.00 - 14.45	management
14:45 - 15.00	evaluation
15.00 - 15.30	PhD candidates
15.30 - 15.45	evaluation
15.45 - 16.30	senior staff
16.30 - 16:45	evaluation
16:45 - 17:30	Early-career staff
17.30 - 18:00	reflecting programme 1

### Tuesday October 10

Time	Part
<b>University of Amsterdam</b>	
08.30 - 09.00	committee preparation programme 2
09.00 - 09.45	management
09.45 - 10.00	evaluation
10.00 - 10.30	PhD candidates
10:30 - 10:45	evaluation
10.45 - 11.30	senior staff
11.30 - 11.45	evaluation
11.45 - 12.30	Early-career staff
12.30 - 13.00	Reflecting programme 2
13:00 - 13.30	lunch
<b>Open Universiteit</b>	
13.30 - 14.00	committee preparation programme 3
14.00 - 14.45	management
14:45 - 15.00	evaluation
15.00 - 15.30	PhD candidates
15.30 - 15.45	evaluation
15.45 - 16.30	senior staff
16.30 - 16:45	evaluation
16:45 - 17:30	Early-career staff
17.30 - 18:00	reflecting programme 3



**Wednesday October 11**

Time	Part
<b>Utrecht University</b>	
08.30 - 09.00	committee preparation programme 4
09.00 - 09.45	management
09.45 - 10.00	evaluation
10.00 - 10.30	PhD candidates
10:30 - 10:45	evaluation
10.45 - 11.30	senior staff
11.30 - 11.45	evaluation
11.45 - 12.30	Early-career staff
12.30 - 13.00	Reflecting programme 4
13:00 - 13.30	lunch
<b>University of Groningen</b>	
13.30 - 14.00	committee preparation programme 5
14.00 - 14.45	management
14:45 - 15.00	evaluation
15.00 - 15.30	PhD candidates
15.30 - 15.45	evaluation
15.45 - 16.30	senior staff
16.30 - 16:45	evaluation
16:45 - 17:30	Early-career staff
17.30 - 18:00	reflecting programme 5

**Thursday October 12**

Time	Part
<b>Leiden University</b>	
08.30 - 09.00	committee preparation programme 6
09.00 - 09.45	management
09.45 - 10.00	evaluation
10.00 - 10.30	PhD candidates
10:30 - 10:45	evaluation
10.45 - 11.30	senior staff
11.30 - 11.45	evaluation
11.45 - 12.30	Early-career staff
12.30 - 13.00	Reflecting programme 6
13:00 - 13.30	lunch
<b>Maastricht University</b>	
13.30 - 14.00	committee preparation programme 7
14.00 - 14.45	management
14:45 - 15.00	evaluation



15.00 - 15.30	PhD candidates
15.30 - 15.45	evaluation
15.45 - 16.30	senior staff
16.30 - 16:45	evaluation
16:45 - 17:30	Early-career staff
17.30 - 18:00	reflecting programme 7

**Friday January 28**

Time	Part
<b>Erasmus University Rotterdam</b>	
08.30 - 09.00	committee preparation programme 8
09.00 - 09.45	management
09.45 - 10.00	evaluation
10.00 - 10.30	PhD candidates
10:30 - 10:45	evaluation
10.45 - 11.30	senior staff
11.30 - 11.45	evaluation
11.45 - 12.30	Early-career staff
12.30 - 13.00	Reflecting programme 8
13:00 - 14.00	lunch
14.00 - 16:30	preliminary reflection programmes by committee
16:30 - 18:00	Joint preliminary feedback and conclusion



## Appendix B- Quantitative data

**Table 1 Research staff in # and FTE – Vrije Universiteit Amsterdam**

	2017		2018		2019		2020		2021		2022	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Full prof	19	9.64	22	11.38	23	12.36	23	12.66	25	13.26	40	17.49
Associate prof	23	9.12	27	12	32	7.76	36	17.99	35	16.25	25	14.11
Assistant prof	15	6.72	15	5.26	13	5.39	13	5.01	15	4.98	20	9.45
Postdocs	46	28.52	54	28.08	45	26.24	47	22.24	44	22.75	42	21.96
PhD candidates	89	56.67	100	62.65	93	55.16	81	44.24	75	42.69	67	44.21
<b>Total scientific staff</b>	<b>192</b>	<b>110.67</b>	<b>218</b>	<b>119.31</b>	<b>206</b>	<b>106.91</b>	<b>200</b>	<b>102.14</b>	<b>194</b>	<b>99.93</b>	<b>194</b>	<b>107.22</b>

Notes:

- Data has been retrieved from PURE (Elsevier), the VU's Current Research Information System (CRIS).
- Headcount is the number of persons with a research task, corrected for the duration of appointment, averaged over the year.
- FTE: only the part of the contract reserved for research tasks, corrected for the duration of contract. Only scientific staff with a >0.1 FTE is included. Guest contracts are not included except for those exceeding 0.1 FTE.
- The number of FTEs represents research time (may vary per person according to the role and responsibility). FBMS directive is: full, assistant, and associate professors devote approximately 50% of their appointment to research; postdocs 100%; and PhD-candidates at least 80%. However, research time for postdocs and PhD-candidates is not consistently registered and FTEs do not apply to external PhD-candidates. The average time for PhD-candidates is thus lower than may be expected.
- If a contract starts/ends throughout the year, PURE accounts this when summing FTEs.
- Support staff is defined as employees who have a research task or who (in)directly contribute to the research output, e.g., data stewards, research associates and assistants, and technical support.

**Table 2 Funding – Vrije Universiteit Amsterdam**

	2017		2018		2019		2020		2021		2022	
	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
<i>Funding in M€/%</i>												
Direct research funding	1.88	6.23	2.36	7.32	1.93	6.08	2.03	6.39	2.11	6.23	2.11	5.90
Research grants	3.15	10.44	3.24	10.08	2.48	7.83	3.14	9.88	3.18	9.37	3.50	9.72
Contract research	6.27	20.76	6.29	19.55	6.50	20.51	5.43	17.09	6.08	17.94	6.04	16.89
<b>Total research funding</b>	<b>11.31</b>		<b>11.89</b>		<b>10.91</b>		<b>10.60</b>		<b>11.37</b>		<b>11.65</b>	
<i>Expenditure in M€/%</i>												
Personnel costs	8.95	79.14	9.56	80.36	9.22	84.58	9.01	85.05	9.44	82.97	9.54	81.97
Material costs	2.22	19.59	1.89	15.91	1.27	11.66	1.13	10.70	1.49	13.14	1.64	14.11
Other costs	0.14	1.27	0.44	3.73	0.41	3.76	0.45	4.25	0.44	3.89	0.46	3.92
<b>Total expenditure</b>	<b>11.31</b>		<b>11.89</b>		<b>10.90</b>		<b>10.59</b>		<b>11.37</b>		<b>11.64</b>	

Notes:

- Direct funding (1, first row) is direct funding (core funding lump-sum budget)
- Direct funding (1b-OZ, third row) is direct research funding including infrastructure and support.
- Research grants (2, fourth row) is obtained in national scientific competition (e.g., NWO, KNAW)
- Contact research (3, fifth row) are grants obtained in international competition (e.g., ERC, EU Horizon, MSCA) and funds obtained for specific projects from external organisations such as industry, government ministries, charitable – and health organisations.



Table 3 PhD completion – Vrije Universiteit Amsterdam

Enrolment				Success rates						
Starting year	M	F	M+F	4 yr	5 yr	6 yr	7 yr	8 yr	Not yet finished	Discontinued
				#	#	#	#	#	#	#
2013	1	10	11	8	0	1	1	1	0	0
2014	26	39	65	32	12	3	4	3	11	0
2015	28	64	92	52	14	3	4	0	19	10
2016	11	13	24	11	2	3			8	0
2017	9	20	29	7	7				15	5
2018	10	35	45	8					37	3
2019	6	17	23	0					23	2
<b>Total</b>	<b>91</b>	<b>198</b>	<b>289</b>	<b>118</b>	35	<b>10</b>	<b>9</b>	<b>4</b>	<b>113</b>	<b>20</b>

## Notes

- Data was retrieved from Hora Finita (the VU's registration system for PhD-candidates).
- The number of enrolled PhD candidates may disagree with the data generated by PURE (cf. Table A.1).





**Table 1 Research staff in # and FTE – University of Amsterdam**

	2017		2018		2019		2020		2021		2022	
	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE
Full prof <sup>1</sup>	18	10	19	9.6	19	10.1	20	10	20	9.8	20	9.8
Associate prof	18	7	18	8.9	16	8.6	16	7.6	17	7.5	18	8
Assistant prof	58	26.7	56	26.6	49	26.4	51	23.2	64	24.6	67	26.3
Postdocs	34	23.1	31	22	35	25.6	36	27.4	31	27.7	31	22.7
PhD candidates <sup>2</sup>	61	48.8	70	56	78	62.4	78	62.4	85	68	91	72.8
<b>Total scientific staff</b>	<b>189</b>	<b>115.6</b>	<b>194</b>	<b>123.1</b>	<b>197</b>	<b>133.1</b>	<b>201</b>	<b>130.6</b>	<b>217</b>	<b>137.6</b>	<b>227</b>	<b>139.6</b>

<sup>1</sup> Only researchers with an appointment between 1-1-2017 and 1-1-2023 are included. Not included: research appointments of < 0.1, student-assistants, retired researchers, guest researchers.

<sup>2</sup> PhD students employed by the UvA or on a scholarship. All PhDs count for .80 FTE.

**Table 2 Funding – University of Amsterdam**

	2017		2018		2019		2020		2021		2022	
	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
<i>Funding in M€/%</i>												
Direct funding <sup>1</sup>	11.092	66.9	9.351	60.2	10.866	57.7	11.388	61.1	11.271	57.8	11.956	61.8
Research grants <sup>2</sup>	1.774	10.7	2.396	15.4	3.181	16.9	2.727	14.6	3.277	16.8	4.313	22.3
Contract research <sup>3</sup>	2.559	15.4	2.954	19.0	3.708	19.7	3.932	21.1	4.350	22.3	2.682	13.9
Other <sup>4</sup>	1.152	7.0	821	5.3	1.082	5.7	588	3.2	600	3.1	390	2.0
<b>Total funding</b>	<b>16.578</b>		<b>15.524</b>		<b>18.839</b>		<b>18.637</b>		<b>19.500</b>		<b>19.343</b>	
<i>Expenditure in M€/%</i>												
Personnel costs	10.614	58.8	10.760	62.3	11.241	58.9	10.976	60.8	12.407	66.9	12.336	66.1
Material costs	3.142	17.4	2.131	12.3	3.309	17.3	2.091	11.6	1.270	6.9	1.443	7.7
Other costs	4.284	23.7	4.376	25.3	4.533	23.8	4.988	27.6	4.860	26.2	4.881	26.2
<b>Total expenditure</b>	<b>18.040</b>		<b>17.268</b>		<b>19.085</b>		<b>18.057</b>		<b>18.538</b>		<b>18.661</b>	

<sup>1</sup> The 1<sup>st</sup> flow of funds income is equivalent to Direct Funding. This includes:

- Performance budget: Promotions (K€ x number) and budget based on a surcharge on OWI performance (25%) \*)  
Transferred State contribution: SEO funds.
  - Matching budget: Based on need (derived from budgets 2<sup>nd</sup> and 3<sup>rd</sup> flow of funds) up to a maximum of the available faculty budget. \*\*) Target budgets: Research Priority Areas, theme budgets.
- \*) This is distributed within the UvA on the basis of credits and degrees.  
\*\*) Faculty receive budget based on percentage of turnover:
- |                                                    |     |
|----------------------------------------------------|-----|
| Matching 1 <sup>st</sup> flow of funds competition | 15% |
| Matching now                                       | 60% |
| Matching EU                                        | 35% |
| Matching 3 <sup>rd</sup> flow of funds             | 15% |

<sup>2</sup> Research grants obtained in national scientific competition (e.g. grants from NWO and KNAW).

<sup>3</sup> Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations.

<sup>4</sup> Funds that do not fit into the other categories.



**Table 3 PhD completion – University of Amsterdam (employed and scholarship)**

Enrolment				Cumulative success rates <sup>1</sup>													
Starting year				≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		≤ 8 yr		Not yet finished		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2013	4	9	13	0	0	6	46	12	92	13	100	13	100	0	0	0	0
2014	6	3	9	0	0	6	67	6	67	7	78	8	89	1	11	0	0
2015	9	16	25	3	12	8	32	13	52	15	60	15	60	5	20	5	20
2016	3	9	12	1	8	4	33	8	67	9	75	9	75	0	0	3	25
2017	8	6	14	0	0	2	14	3	21	3	21	3	21	10	72	1	7
2018	8	16	24	1	4	2	8	2	8	2	8	2	8	20	84	2	8
2019	4	11	15	1	7	1	7	1	7	1	7	1	7	14	93	0	0
<b>Total</b>	<b>42</b>	<b>70</b>	<b>112</b>	<b>6</b>	<b>5</b>	<b>29</b>	<b>26</b>	<b>45</b>	<b>40</b>	<b>50</b>	<b>45</b>	<b>51</b>	<b>47</b>	<b>50</b>	<b>45</b>	<b>11</b>	<b>10</b>

<sup>1</sup> The public defence counts as the end of the graduation period (not the acceptance by the committee).



**Table 1 Research staff in # and FTE – Open Universiteit<sup>1,2</sup>**

	2017		2018		2019		2020		2021		2022	
	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE
Full prof	6	1.7	7	1.9	6	1.8	5	1.5	5	1.5	6	1.8
Associate prof	5	1.4	6	1.5	5	1.3	5	1.3	7	1.9	9	2.6
Assistant prof	39	9.2	43	10.2	39	9.3	43	9.7	50	11.6	55	12.7
Postdocs <sup>3</sup>	1	0.6	5	3.9	4	3.1	3	1.3	2	0.3	2	0.9
PhD candidates <sup>4</sup>	4	3.2	5	4	8	6.4	10	8	13	10.4	13	10.4
<b>Total scientific staff</b>	<b>55</b>	<b>16.1</b>	<b>66</b>	<b>21.5</b>	<b>62</b>	<b>21.9</b>	<b>66</b>	<b>21.0</b>	<b>77</b>	<b>25.7</b>	<b>85</b>	<b>28.4</b>

<sup>1</sup> Presented are average research FTEs in a given year, including management tasks; when a staff member is promoted, the average time in each position is used.

<sup>2</sup> Not included are research appointments < 0.1 FTE, student-assistants, retired researchers, guest researchers, and professors by special appointment.

<sup>3</sup> Postdocs refers to all researchers 1-4 in the UFO system, thus including those that have not yet received their PhD.

<sup>4</sup> PhD candidates includes those with an employee status and all count for 0.80 FTE.

**Table 2 Funding – Open Universiteit**

	2017		2018		2019		2020		2021		2022 <sup>7</sup>	
	k€	%	k€	%	k€	%	k€	%	k€	%	k€	%
<i>Funding in k€/ %<sup>1</sup></i>												
Direct funding <sup>2</sup>	1,438	80	1,378	74	1,539	83	1,467	77	2,059	80	2,380	73
Research grants <sup>3</sup>	-	0	-	0	11	1	142	7	368	14	549	17
Contract research <sup>4</sup>	284	16	306	16	173	9	160	7	126	5	117	4
Other <sup>5</sup>	71	4	186	10	120	7	199	9	34	1	235	7
<b>Total funding</b>	<b>1,793</b>		<b>1,869</b>		<b>1,843</b>		<b>2,148</b>		<b>2,586</b>		<b>3,280</b>	
<i>Expenditure in k€/ %<sup>1</sup></i>												
Personnel costs <sup>6</sup>	1,432	93	1,501	92	1,570	97	1,99	90	2,317	92	2,482	87
Material costs <sup>6</sup>	100	7	135	8	49	3	231	10	197	8	355	13
Other costs	-	0	-	0	-	0	-	0	-	0	-	0
<b>Total expenditure</b>	<b>1,532</b>		<b>1,636</b>		<b>1,619</b>		<b>2,222</b>		<b>2,514</b>		<b>2,784</b>	

<sup>1</sup> All amounts are in k€ with k=1,000.

<sup>2</sup> Includes basic financing and lump-sum budget.

<sup>3</sup> Research grants obtained in national scientific competition (e.g., grants from NWO and KNAW).

<sup>4</sup> Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations.

<sup>5</sup> Funds that do not fit into the other categories, including funding from the multidisciplinary research programme.

<sup>6</sup> Including 30% from direct funding.

<sup>7</sup> Excluding €18,675 ELSA lab funding for the contribution of the faculty of psychology to this project, as the faculty is not the primary applicant.



Table 3 PhD completion – Open Universiteit

Enrolment				success rates											
Starting year	M	F	M+F	≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		Not yet finished		Discontinued	
				#	%	#	%	#	%	#	%	#	%	#	%
2013	-	2	2	-	0	1	50	2	100	-	0	-	0	-	0
2014	-	1	1	-	0	-	0	-	0	-	0	-	0	1	100
2015	-	-	-	-	0	-	0	-	0	-	0	-	0	-	0
2016	-	1	1	-	0	-	0	-	0	-	0	1	100	-	0
2017	-	3	3	-	0	2	67	-	0	-	0	-	0	1	33
2018	-	2	2	-	0	-	0	-	0	-	0	2	100	-	0
2019	-	3	3	-	0	-	0	-	0	-	0	3	100	-	0
<b>Total</b>		<b>12</b>	<b>12</b>	<b>-</b>	<b>0</b>	<b>3</b>	<b>25</b>	<b>4</b>	<b>33</b>	<b>-</b>	<b>0</b>	<b>6</b>	<b>50</b>	<b>2</b>	<b>17</b>



**Table 1 Research staff in FTE – Utrecht University**

	2017	2018	2019	2020	2021	2022
Full prof	11.9	14.1	14.3	15.0	15.6	17.5
Associate prof	11.1	9.4	8.4	11.1	9.1	10.7
Assistant prof	28.6	26.8	26.8	26.1	30.8	32.9
Postdocs	14.4	13.5	17.7	22.6	17.1	14.1
PhD candidates	64.0	63.0	59.7	58.3	60.5	62.3
<b>Total scientific staff</b>	<b>130.0</b>	<b>126.8</b>	<b>126.9</b>	<b>133.1</b>	<b>133.1</b>	<b>137.5</b>

## Notes

- Numbers are based on reference data of September 1 of that specific year.
- Management tasks are excluded in the FTE.
- Professors by special appointment are included as head count Postdocs refers to all researchers 1–4 in the UFO system, also if they have not yet received their PhD.
- PhD candidates include candidates with employee status ('AiOs') and candidates without employee status, receiving internal or external funding (e.g., university or international scholarships). These latter candidates are counted as .8 FTE.

**Table 2 Funding – Utrecht University**

	2017		2018		2019		2020		2021		2022	
<i>Funding in k€/%</i>	k€	%	k€	%	k€	%	k€	%	k€	%	k€	%
Direct funding <sup>1</sup>	8.532	82	8.876	81	9.109	64	9.888	62	10.603	79	12.062	70
Research grants <sup>2</sup>	1.555	15	1.311	12	3.758	27	2.599	16	1.216	9	2.070	12
Contract research <sup>3</sup>	0.279	3	0.732	7	1.275	9	3.414	21	1.672	12	2.995	17
<b>Total funding</b>	<b>10.366</b>		<b>10.919</b>		<b>14.142</b>		<b>15.900</b>		<b>13.490</b>		<b>17.127</b>	
<i>Expenditure</i>												
Personnel costs	8.811	81	11.013	88	10.993	86	12.157	92	13.547	92	14.091	92
Other costs	2.098	19	1.491	12	1.824	14	1.033	8	1.235	8	1.282	8
<b>Total expenditure</b>	<b>10.909</b>		<b>12.504</b>		<b>12.817</b>		<b>13.189</b>		<b>14.782</b>		<b>15.374</b>	

Note. Figures represent money received from funding sources, often in multiple tranches during the lifespan of the grant (instead of everything at once during the first year of the grant).

<sup>1</sup> Direct funding (lump-sum budget without matching or grants).

<sup>2</sup> Research grants obtained in national scientific competition (e.g., grants from NWO, KNAW). Funding is registered at the time a specific grant was received.

<sup>3</sup> All other grants (European grants, ministries, governmental or professional organizations, contract research).

**Table 3 PhD completion – Utrecht University (employed)**

Enrolment				Cumulative success rates													
Starting year				≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		≤ 8 yr		Not yet finished		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2013	5	13	18	6	33	1	6	3	17	2	11	3	17	1	6	2	11
2014	6	7	13	6	46	4	31	1	8	0	8	1	8	0	0	1	8
2015	9	11	20	6	30	7	35	2	10	1	5	0	0	2	10	2	10
2016	4	7	11	2	18	5	45	2	18	0	0	-	-	2	18	0	0
2017	5	4	9	2	22	1	11	0	0	-	-	-	-	5	56	1	11
2018	4	5	6	0	0	2	33	-	-	-	-	-	-	4	67	0	0
2019	1	10	15	1	7	-	-	-	-	-	-	-	-	13	87	1	7
<b>Total</b>	<b>35</b>	<b>57</b>	<b>92</b>	<b>23</b>	<b>25</b>									<b>27</b>	<b>29</b>	<b>7</b>	<b>8</b>



**Table 1 Research staff in # and FTE – University of Groningen**

	2017		2018		2019		2020		2021		2022	
	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE
Full prof	18	7.2	17	6.5	16	6.2	16	6.2	16	6.2	15	6.0
Associate prof	30	10.5	32	11.0	35	11.7	34	11.2	33	10.8	33	10.8
Ass prof	35	12.8	40	14.8	40	14.8	40	14.4	37	13.5	36	13.2
Postdocs	27	22.6	30	21.7	29	21.2	19	13.7	17	12.2	17	13.3
PhD candidates	65	48.9	71	53.4	81	62.5	72	52.5	79	57.9	80	59.6
<b>Total research staff</b>	<b>175</b>	<b>102.0</b>	<b>190</b>	<b>107.6</b>	<b>201</b>	<b>116.3</b>	<b>181</b>	<b>97.9</b>	<b>182</b>	<b>100.6</b>	<b>181</b>	<b>102.9</b>

## Notes:

- All figures are provided for 31 December of the given year.
- The administrative systems only record total FTE employment per staff member, not each individual's allocation towards research and teaching/other duties. To convert total FTE into the reported research FTE, following conversions are used: (assistant/associate/full) professor: 40% research, PhD-candidates: 80% research, postdocs 100% research.
- The HI does not employ any support staff, as support staff is employed for all departments simultaneously at the faculty level.

**Table 2 Funding – University of Groningen**

	2017		2018		2019		2020		2021		2022	
	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
<i>Funding in M€/%</i>												
Direct funding <sup>1</sup>	10.802	72	11.449	71	12.088	75	13.173	79	13.313	75	14.635	77
Research grants <sup>2</sup>	1.504	10	1.711	11	1.745	11	1.854	11	2.030	11	2.197	12
Contract research <sup>3</sup>	2.071	14	2.386	15	1.888	12	1.214	7	1.614	9	1.658	9
Other <sup>4</sup>	0.571	4	0.544	3	0.462	3	0.493	3	0.736	4	0.505	3
<b>Total research funding</b>	<b>14.949</b>		<b>16.090</b>		<b>16.183</b>		<b>16.734</b>		<b>17.694</b>		<b>18.994</b>	
<i>Expenditure in M€/%</i>												
Personnel costs	13.533	89	14.518	90	16.005	92	16.086	95	16.391	94	16.409	93
Material costs	0.09	1	0.09	1	0,12	1	0,103	1	0,083	0	0,089	1
Other costs	1.616	11	1.499	9	1.279	7	0.816	5	1.043	6	1.157	7
<b>Total expenditure</b>	<b>15.240</b>		<b>16.107</b>		<b>17.403</b>		<b>17.005</b>		<b>17.517</b>		<b>17.656</b>	

<sup>1</sup> Direct funding (*basisfinanciering / 1e geldstroom*, lump-sum budget).

<sup>2</sup> Research grants obtained in national scientific competition (e.g., grants from NWO).

<sup>3</sup> Research contracts for specific research projects from external organisations.

<sup>4</sup> Funds that do not fit into the other categories.

## Further notes:

- The posts direct funding and personnel costs contain funding and costs for all staff. The vast majority of staff has both research and teaching duties. On average, roughly 60% of employment is spent on research. Using this percentage, the total revenues for the assessment period are direct funding k€ 45,276 (64%), research grants k€ 11,041 (16%), contract research k€ 10,831 (15%) and other k€ 3,311 (5%). The total costs for the assessment period are personnel costs k€ 55,765 (88%), material costs k€ 576 (1%), and other costs k€ 7,370 (12%).
- Bursary PhD-students (VSNU Type 2; cf. Table E3) are not part of this overview as these are budgeted on the faculty level.
- Costs for housing, ICT, research support, etc., are all budgeted on the faculty level.



Table 3 PhD completion – University of Groningen (employed and scholarship)

Enrolment				Cumulative success rates											
Starting year				≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		Not yet finished		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%
2014	2	10	12	0	0%	5	42%	5	42%	10	83%	1	8%	1	8%
2015	8	8	16	0	0%	7	44%	12	75%	13	81%	2	13%	1	6%
2016	5	10	15	0	0%	4	27%	8	53%	9	60%	5	33%	1	7%
2017	8	13	21	1	5%	8	38%	10	48%			8	38%	3	14%
2018	8	10	18	1	6%							15	83%	2	11%



**Table 1 Research staff in FTE – Leiden University**

	2017		2018		2019		2020		2021		2022	
	FTE		FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Full prof	6.3		7.2		7.1		7.1		7.1		7.4	
Associate prof	8.8		7.9		8.8		9.5		10.4		11.7	
Assistant prof	16.7		17.6		20.0		21.0		21.0		18.9	
Postdocs	19.2		20.6		26.9		32.8		28.5		22.2	
PhD candidates	47.9		51.1		50.9		50.7		45.4		42.3	
<b>Total research staff</b>	<b>98.9</b>		<b>104.4</b>		<b>113.7</b>		<b>121.1</b>		<b>112.4</b>		<b>102.5</b>	

Notes:

- Research staff are given in FTEs dedicated to research; research appointments of <.1 are not included.
- UHDs include professors by special appointment since all Leiden professors by special appointment are also UHDs.
- PhDs count for .8 FTE.

**Table 2 Funding – Leiden University**

	2017		2018		2019		2020		2021		2022	
	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
<i>Funding in M€/%</i>												
Direct funding	3.304	34	3.762	31	4.003	30	4.152	72	4.608	43	4.664	49
Research grants	5.153	53	4.190	35	6.472	49	-0.642	-11	2.227	21	1.382	15
Contract research	1.253	13	4.086	34	2.860	21	2.262	39	3.767	36	3.511	37
Other												
<b>Total funding</b>	<b>9.710</b>		<b>12.038</b>		<b>13.335</b>		<b>5772</b>		<b>10.602</b>		<b>9.558</b>	
<i>Expenditure in M€/%</i>												
Personnel costs	6.513	80	7.695	85	8.461	83	9.271	90	9.621	87	9.244	86
Other costs	1.593	20	1.332	15	1.732	17	1.053	10	1.425	13	1.468	14
<b>Total expenditure</b>	<b>8.106</b>		<b>9.027</b>		<b>10.193</b>		<b>10.324</b>		<b>11.047</b>		<b>10.712</b>	

Notes:

- Direct funding (lump-sum budget, 1e *geldstroom* (without matching or grants).
- Direct funding (lump-sum budget, 1e *geldstroom* (without matching or grants).
- Research grants obtained in national competition (e.g., grants from NWO, KNAW, ZonMW, etc.) The total sum of a grant is distributed over the number of years of the project.
- Contract research and EU funding (e.g., Horizon2020, ERC, Templeton, Volkswagen Stiftung, ministries, other governmental organisations, etc.). The total sum of a grant is distributed over the number of years of the project.





**Table 3 PhD completion – Leiden University**

Enrolment				Cumulative success rates											
Starting year	M	F	M+F	≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		Ongoing		Discontinued	
				#	%	#	%	#	%	#	%	#	%	#	%
2014	5	19	24	2	8%	10	42%	15	63%	16	67%	5	21%	3	13%
2015	3	9	12	4	33%	7	58%	10	83%	11	92%	-	-	1	8%
2016	9	17	26	2	8%	5	19%	8	31%	10	38%	13	50%	3	12%
2017	8	23	31	-	-	6	19%	8	26%	8	26%	19	61%	4	13%
2018	7	14	21	2	10%	2	10%	2	10%	2	10%	15	71%	4	19%
<b>Total</b>	<b>32</b>	<b>82</b>	<b>114</b>	<b>10</b>	<b>9%</b>							<b>52</b>	<b>46%</b>	<b>15</b>	<b>13%</b>



**Table 1 Research staff in # and (FTE) – Maastricht University<sup>1</sup>**

	2017		2018		2019		2020		2021		2022	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Full prof	11 (5.2)	6 (2.8)	11.1 (5.5)	9.3 (4.8)	11.4 (4.0)	10 (4.6)	14 (4.8)	10.8 (5.2)	15 (5.4)	11.8 (5.2)	16.2 (5.9)	12.8 (5.8)
Associate prof	9,1 (3.9)	8 (4.4)	10.5 (3.3)	6.8 (3.3)	9.7 (2.9)	9.0 (3.4)	9.8 (2.5)	10.3 (3.3)	9.8 (3.6)	9.8 (3.9)	10.8 (3.3)	12 (4.7)
Assistant prof	25.3 (13.6)	38 (17.1)	31.1 (17.3)	37.4 (19.6)	33.7 (14.6)	36.5 (13.2)	32.2 (15.2)	32.8 (14.6)	31.5 (13.5)	30.8 (11.9)	26.0 (11.5)	29.2 (11.8)
Postdocs	15.9 (8.3)	14.3 (9.3)	5.4 (2.9)	13.6 (7.3)	6.7 (5.3)	9.5 (6.7)	6.5 (4.3)	6.0 (4.5)	2.8 (1.9)	16.9 (12.2)	6.5 (5.1)	18.8 (8.8)
PhD candidates <sup>2</sup>	46 (36.8)	56.3 (45)	32.7 (26.1)	58.3 (46.6)	28,0 (22.4)	51.9 (41.5)	30 (24.0)	56.2 (44.9)	40.3 (32.2)	59 (47.2)	43.3 (34.7)	59.4 (47.5)
<b>Total research staff</b>	107.3 (67.8)	122.6 (78.6)	90.8 (55.1)	125 (81.6)	89.5 (49.2)	116.9 (69.4)	92.5 (50.8)	116.1 (72.5)	99.4 (56.6)	128.3 (80.4)	102.9 (60.5)	132.2 (78.6)
<b>Support Staf<sup>3</sup></b>	<b>27 (18.8)</b>		<b>28 (19.2)</b>		<b>28 (20.3)</b>		<b>22 (18.7)</b>		<b>26 (17.8)</b>		<b>30 (18.6)</b>	
<b>Endowed Chairs<sup>4</sup></b>	<b>7</b>		<b>5.1</b>		<b>4.1</b>		<b>4.2</b>		<b>4</b>		<b>3.2</b>	
<b>Visiting fellows<sup>5</sup></b>	<b>1</b>		<b>1</b>		<b>5</b>		<b>2</b>		<b>2</b>		<b>4</b>	

<sup>1</sup> Only researchers who have had an appointment of >.10 at the institute between 1-1-2017 and 1-1-2023 are included in the scientific staff calculation; researchers with a guest appointment do not count.

<sup>2</sup> PhD candidates count towards .80 research FTEs for the period in which they are appointed as a PhD candidate. PhD candidates include:

- PhD candidates with employee status.
- contract PhD candidates on a university or international scholarship.

<sup>3</sup> For FPN, this category includes the roles of research policy officer, research technician, research assistant and data steward.

<sup>4</sup> Only endowed chairs with an appointment >.10 FTE are included. Only N is reported, not FTE.

<sup>5</sup> Only visiting fellows (from postdocs to professors) with a visit of two weeks or longer are included. Only N is reported, not FTE.

The number of staff (# and FTE) in each category is adjusted for the number of months they worked in that position in a given year (because of a promotion or entering/leaving employment during the year). For example, if someone worked as a full professor for 9 months in 2021, that person counted for 0,8 in the number of professors for that year.



Table 2 Funding – Maastricht University

	2017		2018		2019		2020		2021		2022	
<i>Funding in M€/%</i>	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
Direct funding <sup>1</sup>	8.316	57	8.915	64	9.270	63	9.726	64	11.348	64	12.123	65
Research grants <sup>2</sup>	2.754	19	3.030	22	2.712	18	2.404	16	2.538	14	2.163	12
Contract research <sup>3</sup>	3.455	24	2.033	15	2.751	19	3.081	20	3.938	22	4.422	24
<b>Total funding</b>	<b>14.524</b>		<b>13.978</b>		<b>14.733</b>		<b>15.211</b>		<b>17.824</b>		<b>18.709</b>	
<i>Expenditure M€/%</i>	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
Personnel <sup>4</sup>	9.711	71	9.906	73	10.087	73	10.656	75	11.224	76	11.815	76
Material costs	0.236	2	0.095	1	0.100	1	0.080	1	0.830	1	0.087	1
Other costs	3.765	27	3.587	26	3.573	26	3.413	24	3.525	24	3.574	23
<b>Total expenditure</b>	<b>13.712</b>		<b>13.588</b>		<b>13.761</b>		<b>14.148</b>		<b>14.832</b>		<b>15.476</b>	

<sup>1</sup> Direct funding (base financing / lump-sum budget). At FPN-UM calculated as 45% of the direct funding OC&W plus tuition/examination fees.

<sup>2</sup> Research grants obtained in national scientific competition (e.g., grants from NWO and KNAW).

<sup>3</sup> Research contracts obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations.

<sup>4</sup> At FPN-UM calculated as 45% of all personnel costs.

Table 3 PhD completion – Maastricht University (employed and scholarship)

Enrolment	Cumulative success rates														
	Starting year			≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		Ongoing		Discontinued	
	M	F	M+F	#	%	#	%	#	%	#	%	#	%	#	%
2013	11	8	19	4	21%	5	26%	13	68%	15	79%	1	5%	3	16%
2014	14	11	25	3	12%	14	56%	17	68%	21	84%	1	4%	3	12%
2015	4	9	13	1	7%	4	31%	6	46%	8	62%	2	15%	3	23%
2016	12	15	27	4	15%	14	52%	19	70%	21	78%	4	15%	2	7%
2017	6	21	27	3	11%	13	48%	16	59%			10	37%	1	4%
2018	5	18	23	1	4%	5	22%					16	69%	2	9%
2019	8	12	20	0	0%							18	90%	2	10%
<b>Total</b>	<b>60</b>	<b>94</b>	<b>154</b>	<b>16</b>	<b>14%</b>							<b>52</b>	<b>44%</b>	<b>16</b>	<b>14%</b>

**Table 1 Research staff in # and fte – Erasmus University Rotterdam<sup>a,b</sup>**

	2017		2018		2019		2020		2021		2022	
	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE	#	FTE
Full prof	9	2.7	10	3.8	17	5.6	18	6.3	18	6.3	19	6.4
Associate prof	14	5.0	15	4.9	9	3.2	11	3.8	17	5.8	18	6.0
Assistant prof	27	8.8	23	7.7	29	9.9	30	10.5	24	8.6	32	11.6
Postdocs <sup>c</sup>	5	2.7	5	2.6	3	1.8	11	5.7	15	7.9	7	4.5
PhD candidates <sup>d</sup>	23	16.3	22	15.5	21	15.7	26	9.8	25	18.9	25	19.0
<b>Total research staff</b>	<b>78</b>	<b>35.3</b>	<b>75</b>	<b>34.4</b>	<b>79</b>	<b>36.2</b>	<b>96</b>	<b>46.0</b>	<b>99</b>	<b>47.4</b>	<b>101</b>	<b>47.5</b>

<sup>a</sup> This table includes only staff members with an appointment of at least 0.1 research FTE with 31 December as a reference date.

<sup>b</sup> Research FTEs, including management roles, are calculated as 40% of the real employed time per year for scientific staff and 70% of the real employed time for postdocs and 80% for PhD candidates.

<sup>c</sup> Comparable with WOPI category *Onderzoeker*.

<sup>d</sup> This includes Standard PhD candidates with employee status (*AiO/promovendi*) and Contract PhD candidates without employee status, receiving external funding or a university scholarship, who are conducting research under the authority of EUR-PSY with the primary aim of graduating (*beurspromovendus*). External PhD candidates (*buitenpromovendi*) are not included in this table.

**Table 2 Funding – Erasmus University Rotterdam**

	2017		2018		2019		2020		2021		2022	
	M€	%	M€	%	M€	%	M€	%	M€	%	M€	%
<i>Funding in FTE/%</i>												
Direct funding <sup>1</sup>	4.066	65	3.794	88	3.957	62	4.013	86	4.295	58	4.168	72
Research grants	0.820	13	0.520	12	2.266	36	0.277	6	1.111	15	0.742	13
Contract research	1.294	21	0.015	0	0.123	2	0.358	8	1.968	27	0.892	15
<b>Total funding</b>	<b>6.180</b>		<b>4.329</b>		<b>6.346</b>		<b>4.648</b>		<b>7.374</b>		<b>5.802</b>	
<i>Expenditure in M€/%</i>												
Personnel costs <sup>2</sup>	2.605	67	2.884	68	3.494	77	3.979	83	4.038	79	3.622	78
Other costs <sup>3</sup>	1.277	33	1.342	32	1.044	23	0.761	16	1.043	21	1.014	22
<b>Total expenditure</b>	<b>3.882</b>		<b>4.226</b>		<b>4.538</b>		<b>4.740</b>		<b>5.081</b>		<b>4.636</b>	

<sup>1</sup> Direct research funding (lump-sum budget, first funding stream (without matching or grants), calculated as 40% of the total budget.

<sup>2</sup> Calculated as 40% of the total personnel costs.

<sup>3</sup> All research-related costs that are funded.

**Table 3 PhD completion – Erasmus University Rotterdam**

Enrolment				Cumulative success rates <sup>1</sup>											
				≤ 4 yr		≤ 5 yr		≤ 6 yr		≤ 7 yr		Not yet finished		Discontinued	
Starting year	M	F	M+F <sup>2</sup>	#	%	#	%	#	%	#	%	#	%	#	%
2013	0	3	3	0	0%	1	33%	1	33%	3	100%	0	0%	0	0%
2014	4	5	9	1	11%	4	44%	6	67%	6	67%	0	0%	1	11%
2015	2	7	9	1	11%	3	33%	6	67%	7	78%	1	11%	1	11%
2016	0	6	6	0	0%	2	33%	4	67%	4	67%	1	17%	0	0%
2017	3	5	8	0	0%	1	13%	5	63%			3	38%	0	0%
2018	6	6	12	1	8%	5	42%					5	42%	2	17%
2019	2	5	7	1	0%							6	86%	0	0%

<sup>1</sup> Success rates are based on the PhD ceremony date, several ceremonies have been postponed due to the COVID-19 pandemic.

<sup>2</sup> This includes “standard PhD candidates” with employee status (*AiO/promovendi*) and “contract PhD candidates” without employee status, receiving external funding or a university scholarship, who are conducting research under the authority of EUR-PSY with the primary aim of graduating (*beurspromovendus*). External PhD candidates (*buitenpromovendi*) are not included in this table.