RESEARCH REVIEW

Psychology

2017-2022

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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 advise 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 quantitively 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.

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.