

Executive Board
cvb@eur.nl

Date
February 25, 2022

Subject
Numerus fixus bachelor Psychology for
academic year 2023-2024

Our reference
ESSB/VB/21443/nbo

Your reference
-

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Appendix
- Proposed selection procedure
- Report selection procedure in 2019-
2020

Department
Dean

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Dear Executive Board,

With this letter, I would like to request a continued numerus fixus for the bachelor Psychology, for the academic year 2023-2024, for an intake of maximum 600 students.

In the appendices of this letter, we have added a description of the proposed selection procedure, that is mostly identical to our proposal last year, and a report on the selection procedures based on the numerus fixus that took place in 2019-2020 and in 2020-2021 (for enrolments in 2021-2022).

This letter gives insight in our current situation and provides the motivation for our request, which largely overlaps with the motivation we provided last year: 1) we perceive the numerus fixus as necessary to preserve our educational quality and educational methods, and 2) all educational directors of Dutch Psychology programs agreed on implementing a numerus fixus, meaning that if we drop out of this agreement we risk a higher intake than we can handle and the labour market can facilitate.

Current situation

Each year, more students applied for both the Dutch- and English-language tracks of the bachelor psychology, which also led to higher enrolment figures. In 2019-2020, around 950 students enrolled, compared to approximately 700 in the year before. In earlier years, the growth was smaller but already notable. Given the steady increase in the number of students, in 2019 a numerus fixus was implemented for new admissions for the bachelor Psychology and in September 2020 we welcomed the first cohort that was admitted based on a numerus fixus.

Educational quality

The bachelor program uses activating educational methods, such as Problem-Based Learning (PBL) and Team-based learning. These types of learning are based on the idea that the student plays an active role in the learning process (student-centred education). Such methods focus less on lecturing with the purpose of information transfer (as is the case in traditional educational systems). Instead, the aim is to stimulate active participation of the student in small educational groups. While there are a couple of collective lectures in the bachelor program, small-scale tutorials and practical meetings are at the very core of our educational method. A numerus fixus enabled us to get a grip on the size and quality of our programme.

To ensure a high quality and sustainable educational system, we continue to evaluate, and revise the curriculum and educational methods in our bachelor programmes, including Psychology. In alignment with our educational vision, we continue to focus on practical skills training and our educational methods will remain activating, collaborative, and small-scale. Therefore, we argue that a fixus is necessary to maintain our education quality, and to prevent that 'students become a number'.

Nation-wide agreement

In 2019, the "Kamer Psychology", a forum of the VSNU that is hosted by NIP (Nederlands Instituut voor Psychologen) in which education directors of all psychology bachelor programmes in the Netherlands participate, agreed upon establishing a numerus fixus (of 600 students) for all bachelor programmes in psychology in the Netherlands, with the labour market in view. If all universities have more than 950 graduates (the ESSB-intake before the numerus fixus) each year, this would exceed the demand for psychologists in the labour market.

The only exception to the nation-wide agreement is formed by programmes that wish to grow. For now, this only applies to the University of Twente that has a much smaller number of students and no clinical psychology specialisation (i.e., this is the track that attracts most students). If our university would drop out of this agreement, the number of applications for our bachelor psychology would probably increase (for example due to students wanting to avoid, or not successfully completing selection procedures at other universities).

Accessibility

Based on the motivation detailed above, a numerus fixus prevents our intake to exceed our capacity and negatively impact our educational quality. A capacity limitation also suits the EUR-wide strategy to maintain educational quality while student numbers are rising. While considering the numerus fixus a necessary measure, we do wish to limit its negative outcomes (in terms of accessibility) as much as possible. We have therefore designed a selection procedure that aims to select qualified students who are motivated to enrol in this programme, and who may contribute to a diverse classroom. In this process, we value the results students obtained prior to enrolling in the bachelor programme psychology as well as the (untapped) potential of students who are motivated to pursue their diploma in psychology.

Furthermore, we have set the maximum capacity as high as possible, at 600 students. We consider this to be the maximum number of students, based on two factors. First the nation-wide agreement, mentioned above, included a maximum of 600 students; departing from this would potentially deter applicants and cause them to apply at other universities rather than encourage them to consider which programme best suits them. In addition, based on experience with large cohorts prior to implementing a numerus fixus, we feel that a maximum of 600 students is still feasible in terms of educational quality and personal attention to students.

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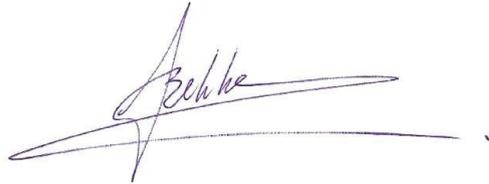
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Evaluation

We will continue to closely monitor and evaluate the selection procedure to ensure it fulfils the abovementioned aims, which are described in more detail in the selection procedure that is attached to this letter.

I hope that you agree with our proposal to implement a numerus fixus for the bachelor Psychology for 2023-2024, for an intake of 600 students, based on this letter and the appendices,

Yours sincerely,

A handwritten signature in purple ink, appearing to read 'Bekkers', with a long horizontal stroke extending to the right.

Prof.dr. V.J.J.M Bekkers
Dean ESSB

Cc: Prof.dr. Bram Steijn, vice-dean education ESSB
Kimberly van Aart MA MSc, policy advisor education ESSB
Carolien Hennekam MA, policy advisor Education & Student Affairs

Selection procedure for B Psychology

For the *numerus fixus* (600) for 2023-2024 at ESSB, Erasmus University Rotterdam

Short introduction

For the academic year 2023-2024 it is proposed to maintain a *numerus fixus* for the bachelor's programme psychology (both the Dutch and international tracks) for 600 students at most, in accordance with an agreement of the Kamer Psychologie VSNU to establish a *fixus* for all bachelor's programmes Psychology in the Netherlands, except for those programmes that wish to grow. For a detailed motivation, please refer to the cover letter.

The proposed *fixus* means that the admission of students will entail two steps:

1. the assessment of the admissibility of applicants (step 1)
2. the ranking of these applicants based on four selection criteria.

These criteria are based on the envisioned profile of our student population and match the objectives that we have.

First, we aim at a student population (in both tracks) that reflects the diverse composition of the Rotterdam population as much as possible. Many graduates find suitable jobs in the metropolitan area of Rotterdam and surroundings. This means that the program delivers students who are well-equipped for the job market of a psychologist in a diverse society.

Second, we strive to select students with a study attitude and motivation that fit with our vision on education and our educational methods, that are primarily small-scale and activating. In many courses we adopt problem-based learning, which is a very active form of education that is particularly suitable for curious, motivated students who can work well with others.

The selection is based on these objectives.

Admission

After registration via Studielink (no later than 15 January 2023) for all applicants their admissibility will be checked. This will be done based on the admission requirements stipulated in Article 2.1 of the bachelor Education & Examination Regulations (EER) for 2022-2023. For the International Bachelor in Psychology track, a language requirement (for English proficiency) is also in place and detailed in the EER.

Selection

Applicants who are deemed eligible for admission will receive an invitation to participate in the selection procedure. This selection is based on the following criteria, that each weigh 25%:

1. school grades
2. scores on an online test (multiple choice)
3. motivation (online questionnaire and open questions)

4. study attitude (online questionnaire)

Part I Grades

1. School grades

Applicants will submit their grades for the penultimate year of prior education (or for the last year if this has been completed already). For Dutch applicants this will probably be the secondary school grades. For applicants with a foreign prior education, the submitted grades will be recalculated based on a conversion table, that is drawn up mainly based on information from Nuffic, to ensure comparability of grades across the pool of applicants.

Part II Selection assessment

Applicants receive materials to be studied in preparation for the test and are given access to an online assessment tool, with which criteria 2 to 4 will be assessed.

This assessment includes a total of about 50 questions and will take a total of 6-7 hours of time to complete (this is comparable to the time spent on selection procedures of other bachelor programs psychology). A Dutch and English version is available for all questions, in accordance with the fact that the programme includes a Dutch- and English-language track. The different parts are described below.

2. Online test

Applicants will be requested to study three recorded lectures and three chapters from basic textbooks on subjects relevant to the psychology programme, that also reflect the educational approach of the bachelor's programme in psychology (problem-based learning). The subjects are based on the study content of the first year of the Psychology bachelor programme. A few questions should be answered by performing a statistical calculation. Methodological questions can also be asked.

The materials provided to students will match those included in the bachelor's programme, meaning that they are in English, and will be of a bachelor-1 level, making the test feasible for applicants. In this way, the students will simultaneously prepare for the online assessment and get a better idea of what awaits them in the first year if they are selected. The answers to the questions can be in English or Dutch, depending on the chosen track. Studying the material in preparation for the exam takes about 5 hours.

The online test will be part of the larger online assessment, which can be interrupted and continued at a later time. However, no earlier or later parts of the test can be seen or changed. The already completed part is saved and one continues with the test. The total time spent on the test is recorded.

The test consists of 15 multiple choice questions (with 3 answer options), 5 for each subject. The applicant must have completed the test before a predetermined date.

3. Motivation

Prospective students must complete an online questionnaire in this part of the online assessment. This consists of an online questionnaire and open questions. The online questionnaire with closed questions covers the applicant's readiness to start and continue the Psychology programme regardless of sacrifices, setbacks, misfortune or disappointing

perspectives. Motivation is also assessed with open questions, in which applicants, among other things, give a motivation for choosing a bachelor's programme in Psychology and for choosing a such a programme at Erasmus University Rotterdam in particular. An important reason to use these open questions is also to encourage student to reflect on their choice and, hence, the questions also serve as a self-selection instrument.

A maximum number of words is available for these answers. The answers are assessed on the extent to which the applicant can clearly motivate the choice within the given word limit. In addition, we also assess diversity in motivations, since we aim at a diverse classroom. The word count of the answers to the open questions will be taken into consideration when scoring these answers. It is expected that word count can be used to filter out individuals who spent little or no effort into writing their answers on the open-ended questions. The number of words is thus used here as an indicator of the effort put into the answer, which should reflect ones' motivation in general. We expect that this will be an effective way, in terms of quality and staff effort, to filter out less motivated students.

4. Study attitude

In the last part of the online assessment, applicants must answer an online questionnaire with closed questions about their study attitude, approach to studying, and professional conduct. This part is not about the motivation for the programme, but about how applicants think about active, small-scale education and how they prepare for studying, and how their study attitudes suit the problem-based learning approach.

An applicant who goes beyond just studying the material, who is curious and has a critical attitude (internalizing behaviour), will score better on this component than a student who primarily learns to pass a test (externalizing behaviour). Also, forms of professional behaviour will be included in this section because it has been shown that these have a predictive value for study success.

Ranking of students

Standard scores (z-scores) will be calculated for each component, so that it is possible to assess how applicants score in relation to each other on the components of the assessment. All z-scores will be summed up to create a total score. In other words, there will be no scores for components of the assessments. Each component assessment contributes equally to the total score.

The total score determines the final rank number for each candidate. When total scores are equal, the score on the motivation questions, within the group of applicants with the same score, determines the final rank number.

When registering in Studielink, applicants choose either the international or Dutch track. However, one ranking will be made for the program, instead of separate rankings per track, as is required by the Higher Education Act (WHW). At first, the rank number determines whether someone is offered a place in the program (when the number is 600 or lower) or not (when the number is 601 or higher).

When an applicant receives a message about the rank number and that rank number means that he / she is selected, this message also includes a confirmation of the track that has been chosen by the applicant and in which he/she is thus placed. After choosing a track, applicants cannot switch from the Dutch track to the international track or the other way around.

In total, an applicant may participate three times in a selection procedure for the bachelor's programme Psychology at the EUR. If students participate several times in a selection procedure for the bachelor's programme Psychology at the EUR, each participation will be regarded as new.

The selection procedure takes place only once a year. The scores and rank numbers of cannot be transferred to the next academic year (or to a different university). The selection procedure must then be completed by the student in its entirety.

The EUR does not organize an inspection of scores, although an applicant has the right to request the personal data concerning him/her (on the basis of the GDPR, article 15). National laws and regulations and corresponding deadlines apply in this selection procedure (see www.studiekeuze123.nl/selection).

Applicants will find information on the admission and selection procedure on the following web pages:

<https://www.eur.nl/en/bachelor/international-bachelor-psychology/admission>

<https://www.eur.nl/bachelor/psychologie/toelating>

Report on bachelor Psychology numerus fixus for academic years 2020-2021 and 2021-2022

PVL / RS / AH, 14-1-2022

1. Qualitative review

For the bachelor Psychology (including the International Bachelor Psychology track), candidates were ranked according to their scores on four criteria:

- 1) GPA of de the diploma/grade list
- 2) Knowledge test
- 3) Questionnaire on motivation
- 4) Questionnaire on study attitude

All four components had equal weight (25%) in the final ranking of the candidates. The criteria were explained a selection regulations and further elaborated in four components of the selection procedure.

Alignment with selection goals

This selection procedure for the bachelor Psychology was first implemented in recruitment year 2019-2020, meaning that in 2020-2021 the first cohort started with the bachelor based on a numerus fixus selection procedure and this was continued for the 2021-2022 cohort. We now have insight into whether the results of the selection procedure match its goals from the 2020-2021 cohort and, where available, we have some limited insights to the 2021-2022 cohort. First, we detail the goals formulated in the application for the numerus fixus below and explain per goal whether these were met and/or whether there was reason for adjusting the selection procedure.

“First, we aim at a student population (in both tracks) that reflects the diverse composition of the Rotterdam population. Many graduates find suitable jobs in the metropolitan area of Rotterdam and surroundings. This means that the program delivers students who are well-equipped for the job market of a psychologist in a diverse society.”

To meet this first objective of the selection procedure, considering the students who ultimately were selected to start with the bachelor, we based the selection procedure on recent scientific insights to assure good predictive validity (i.e., admission results are related to the outcome of interest such as study success) and fairness (i.e., unbiased against diverse students). Research shows that traditional and often-used admission procedures consisting of solely standardized cognitive tests and high school GPA tend to adversely impact students with a migration background, as they show systematic differences in scores between sub-groups, and thus in chances of acceptance (Niessen & Meijer, 2017). Diverse students, such as first-generation students and students with a migration background do, for example, have lower chances of acceptance when only cognitive indicators are assessed (Schmitt et al., 2009; Sinha et al., 2011). Because of our first objective, to make the admission procedures inclusive, we used two approaches, namely the inclusion of non-cognitive criteria and the use of a curriculum sample test (based on Niessen & Meijer, 2017; Stegers-Jager et al., 2015). Non-cognitive, or ‘character-based’ criteria include indications of motivation and study skills and habits, and other behavioural tendencies. Non-cognitive criteria in admission procedures offer the

possibility to compensate for lower cognitive scores, which may reduce adverse impact on selection decisions for minorities. Some studies suggest that the inclusion of these criteria indeed increases the chances of success for minority students, while maintaining good predictive validity (Bradburn & Schmitt, 2019; Schmitt et al., 2009; Stegers-Jager et al., 2015). A first analysis data of the background characteristics of students enrolled in 2020-2021 indicates that 22% of the students from this cohort has a migration background (Erasmus School of Social & Behavioural Sciences, 2021). This percentage is comparable with the percentage of students with a migration background in earlier cohorts 2018-2019 and 2019-2020, when no selection procedure was used. Furthermore, sub-group differences in the overall selection scores within the selected group of students are minimal. These first results are indications that there is no or minimal adverse impact of the used selection criteria and that student population diversity in terms of migration background is not affected by the selection procedure.

“A second aim is that the study attitude and motivation of students fit with our method of education, problem-based learning. Problem-based learning is a very active form of education that is particularly suitable for curious, motivated students who can work well with others.”

Regarding this second aim of the selection procedure, we have designed the procedure in such a way that students were assessed on their motivation to study Psychology, particularly their motivation to study Psychology in Rotterdam with its PBL approach, and their study attitude. When using the results of the exam of the first course in the bachelor, we found the strongest predictors to be the pre-university grades, multiple choice exam results, and the specific motivation question regarding seeking out information activities (Lamoén et al., 2022). For cohort 2020-2021 specifically, it has been found that these predictors also positively correlate with the GPA of the whole first year. The students who enroll after the selection procedure also seem to perform better. In cohort 2018-2019 the number of students who got a positive binding study advice (BSA) was 54% (Erasmus School of Social & Behavioural Sciences, 2021). In the following cohort 2019-2020 around 58% received a positive BSA. Then for the students of cohort 2020-2021, the first who went through our selection procedure, 87% received a positive BSA. These results are, however, influenced by the COVID-19 pandemic and associated measures, such as the prolonged BSA. Nevertheless, when comparing the positive BSA percentages of the Psychology students with other ESSB bachelor programmes, it is clear that the students of the 2020-2021 cohort perform better compared to other students in the similar situation caused by COVID-19. In conclusion, the selection procedure seems to be positively related to study success and the group overall performs better than earlier years in terms of receiving a positive BSA. This indicates that the selection procedure seems to successfully select students who would be likely to excel in our bachelor program.

Student population

For cohort 2020-2021, 274 students started the English-language International bachelor Psychology track, while 275 students started the Dutch-language Psychology track (Erasmus School of Social & Behavioural Sciences, 2021). In total, 549 new students enrolled. In terms of the diversity of this group, at this point we can only say something about nationalities (see above) and conclude that the proportion of international students has increased compared to previous years. Because all applicants participate in the same selection procedure and for procedural justice reasons, we cannot influence these proportions. This may change for future cohorts, depending on the implementation of the

'Wet Taal en Toegankelijkheid' that possibly allows for a fixus (and selection procedure) at the track-level.

Adjustments, with a view on alignment

Finally, compared to the request for implementing a numerus fixus, we made no changes to the *contents* of the selection procedure. In the instruments for assessing applicants on the abovementioned criteria, we have made a change in the division of open and closed questions for the components motivation and study attitude. This has resulted in mostly closed questions and a few open questions. This enabled us to better operationalize motivation and study attitude in a valid way, based on literature on study motivation and study attitude (e.g., Wouters, Croiset, Galindo-Garre, & Kusrkar, 2016), while maintaining a fair selection instrument that relates to expected study progress. Furthermore, this approach enables us to continue to assess the large numbers of applications in a fair, reliable and manageable way (i.e., in terms of staff hours).

Reflection on educational quality

As also explained in our letter detailing the request for a numerus fixus, we consider 600 to be the maximum number of students, based on two factors. First the nation-wide agreement, mentioned in our letter, included a maximum of 600 students; departing from this would potentially deter applicants and cause them to apply at other universities rather than encourage them to consider which programme best suits them, based on contents and educational methods. In addition, based on experience with large cohorts prior to implementing a numerus fixus, we feel that 600 students is quite feasible in terms of educational quality and personal attention to students. Nonetheless, we are monitoring work pressure among staff, as well as our educational concept, and will continue to improve our programme, and/or our selection procedure and maximum capacity, to make sure that educational quality is well-balanced with accessibility.

2. Quantitative review for 2020-2021

	#	%
Applications via Studielink on January 15	2108	
Candidates ranked in April in Studielink	1339	
'Plaatsingsbewijzen' (invitations to enroll) send out in total	899	
Accepted invitations	549	61%
Declined invitations	285	32%
Expired invitations	65	7%
Highest ranking number issued in invitations to enroll	975	
Total appeals	7	
Unfounded:	2	
Withdrawn	5	

2. Quantitative review for 2021-2022

	#	%
Applications via Studielink on January 15	2589	
Candidates ranked in April in Studielink	1670	
'Plaatsingsbewijzen' (invitations to enroll) send out in total	941	
Accepted invitations	548	58.2%
Declined invitations	295	31.4%
Expired invitations	98	10.4%
Highest ranking number issued in invitations to enroll	1001	
Total appeals	8	
Unfounded:	2	
Withdrawn	5	
Settled	1	

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Dean ESSB
Prof. dr. V.J.J.M. Bekkers

-Intern-

Date
25 February 2022

Subject
Letter of advice Numerus Fixus Bachelor
Psychology

Our reference
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Your reference

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Appendices

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Dear Prof. dr. Bekkers,

The Faculty Council of the ESSB would like to give a positive advice concerning the continuation of the numerus fixus for the Bachelor Psychology. We understand the concerns of having too high of an influx. Therefore, we think that having this numerus fixus is a good way of controlling and managing the influx of new students. This way the quality of education will stay intact.

Best regards,
Faculty Council ESSB

Josanne van Dongen (chair)
Marina van den Bosch (vice-chair)

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