

Rules for the PhD Thesis

Approved by the Faculty Board at March 22, 2021

This version is from December 13, 2021

Supplementing or clarifying the Doctorate Regulations¹ the rules are:

1. There is no preference for a monograph or an article-based thesis (following Article 16);
2. Authorship may vary between single-authored and co-authored with others (as a consequence of Article 16, paragraph 5);
3. The research on which the thesis is based is up-to-date (not addressed in the Doctorate Regulations);
4. Building on work conducted prior to the start of the PhD trajectory is possible (not addressed in the Doctorate Regulations); and
5. There are no additional language requirements (as specified in Article 18).

We elaborate on these issues below, and specify supplementing or clarifying rules for a monograph and an article-based thesis.

1. *Form of the thesis: monograph or article-based*

The Doctorate Regulations² distinguish between a monograph and a collection of a number of separate scientific articles³; we call this an article-based thesis.^{4,5} Each thesis, written as a monograph or as an article-based thesis, is examined on its scientific merits. There is no difference in scientific quality per se between these two formats. The Doctorate Regulations treat them equally. There should be a free choice between the two forms.⁶

¹ Unless otherwise stated, we refer to the Doctorate Regulations dated July 15, 2021, including all articles and the procedural regulations. <https://vu.nl/en/research/more-about/doctorate-regulations> or <https://vu.nl/nl/onderzoek/meer-over/promotiereglement>

² Article 16, paragraph 1.

³ A monograph is a specialist work of writing on a single subject. The chapters of a monograph are usually not read independently and each reports on a part of the research. The usual sequence of chapters is one in which the problem is introduced, theoretically explored, the method of investigation explained, the results presented, and finally the answer to the problem is discussed. Each of these components may be addressed in one or more chapters. For example, it is common for results from several case studies to be reported in more chapters. Where a monograph has chapters, an article-based dissertation has articles and a synthesis (although the components in the completed thesis are often called chapters). An article is an independent readable report of a sub-study and may relate to empirical research or literature review. Sometimes other types of reports from the research are also included as separate sections in the article-based dissertation. Examples include an extension of the methodological justification, the questionnaire used in interviews, or the presentation of data in the form of photographs or a reconstruction of the life story of a participant in the study, for which there was no room in the article or supplementary material.

⁴ Also known as cumulative or compilation thesis.

⁵ This distinction is actually along two dimensions. The first dimension is the number of authors (i.e., the number of researchers involved). The second dimension is whether it is one coherent research report versus whether it consists of reports from different sub-studies. Here we discuss the first dimension.

⁶ For example, see this editorial for considerations in choosing the form of the thesis: Fridlund, B. (2010). The dissertation book: Should it be a monograph or a compilation thesis? *European Journal of Cardiovascular Nursing*, 9, 144-145. doi: 10.1016/j.ejcnurse.2010.04.003

2. Authorship

There is a great variation in the ways in which a thesis is created. A thesis can be completely single-authored: the supervisor and others have contributed not or very little to conception and design, or acquisition of data, or analysis and interpretation of data; and have not been involved in drafting the manuscript or revising it critically for important intellectual content.

However, not every thesis in the form of a monograph is processed in this way – there might be co-authors.⁷ This should not lead to a situation where a candidate is completely dependent on the co-authors or supervisors in the writing of the thesis, but on the other hand it may be questionable whether an entirely exclusive performance by the candidate is preferable in a learning process that is characteristic of a PhD trajectory. A PhD project is a learning process, so the candidate is not supposed to have it done all by her- or himself. Therefore, a thesis can be the result of a collaboration of scientists in which the PhD candidate is involved in a specific position. In this collaborative PhD project the supervisor, (other) co-authors and others may have made a substantial contribution to the conception and design, or the acquisition of data, or the analysis and interpretation of data; and may have been involved in the preparation of the manuscript or the critical revision of the manuscript for important intellectual content.

Within these two extremes all kinds of variations are possible, such as that the working method varies per chapter or article.

In all these cases, so both for the monograph and for an article-based thesis, the ‘authorship’ is explained in detail by writing an authorship statement included in the thesis: a description who did what in the research and in reporting the results.⁸ If the thesis consists of chapters or articles with a different working method, this description is given for each chapter or article.⁹ The statement helps the members of the Doctorate Committee to judge the candidate’s contribution to (chapters and articles in) the thesis. The authorship statement should focus on the candidate’s own contribution. The text is written in the first person. Items to address are usually: the overall research question, methodology, research and data collection, data analysis, text and graphs, and the final discussion.

⁷ Co-authors are defined in general as any person who has made a significant contribution to the scientific work (which may or may not include co-writing); co-authors also share responsibility and accountability for the results.

⁸ It speaks for itself that the VU Doctorate Regulations should be followed. The Regulations refers to the Netherlands Code of Conduct for Research Integrity (2018, p. 17), which states: “Ensure a fair allocation and ordering of authorship, in line with the standards applicable within the discipline(s) concerned.” <https://doi.org/10.17026/dans-2cj-nvwu>. The authoritative Dutch version can be found at www.nwo.nl/sites/nwo/files/documents/Nederlandse%2Bgedragscode%2Bwetenschappelijke%2Bintegriteit_2018_NL.pdf. In the social sciences, the APA rules are often used: “The primary author assumes responsibility for the publication, making sure that the data are accurate, that all deserving authors have been credited, that all authors have given their approval to the final draft; and handles responses to inquiries after the manuscript is published.” (<https://www.apa.org/research/responsible/publication>, visited October 20, 2021)

There are many websites with information on how authorship should be assessed. At <https://casrai.org/credit/> a taxonomy can be found that can be used to represent the roles typically played by contributors to scientific scholarly output. The guidelines used by journals are a good starting point for considering ethics in authorship. For example, journals in the field of anthropology refer to <https://publicationethics.org/authorship>. There are also publishers and journals using an ‘author contributions form’ (e.g. www.elsevier.com/___data/promis_misc/jacs_cont_form.pdf), and there are for example journals that refer to guidelines in the field of psychology (www.apa.org/science/about/psa/2015/06/determining-authorship.aspx) or in the field of medicine (www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html). The ICMJE recommends that authorship be based on the following four criteria: (1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND (2) Drafting the work or revising it critically for important intellectual content; AND (3) Final approval of the version to be published; AND (4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

⁹ Article 16, paragraph 5.

3. Up-to-date

Usually a PhD thesis is based on recent insights, based on recent data or data with current relevance, and the work is informed by and in discussion with recent literature. Thus, the research on which the thesis is based is not outdated. In a longer PhD track, this is not always achievable, especially when an article has already been published at the beginning of the track and this article will be reproduced (according to the rules unchanged) in the dissertation. Thus, it is not objectionable if an older part of the research was published earlier (i.e. before the thesis is submitted, for example as article) and the topicality and relevance of the part is indicated in the synthesis.¹⁰

4. Building on work conducted prior to the start of the PhD trajectory

Some PhD projects build on research or use research that was done by the candidate prior to starting the PhD thesis research, and sometimes has already been published. The PhD degree is given to a candidate who conducts her or his research independently,¹¹ and work completed prior to the start of the formal PhD trajectory may serve as a prove. This may even be obvious if that earlier research was embedded in an academic training program to become a researcher (e.g., a research master's degree) or embedded in the professional practice of research, and the candidate wants to pursue that line of research. Upon admission, the supervisor will determine that that work is of sufficient quality and contributes satisfactorily to the attainment of the final objectives of the PhD degree. The candidate and supervisor determine that the previous work meets the rules for the thesis, and that their view is most likely shared by the Doctorate Committee as well.

5. Language

There are no additional requirements to the Doctorate Regulations.¹²

Specific rules for a monograph

Supplementing or clarifying the Doctorate Regulations the rules are:

1. No part of the thesis needs to have been made public before (the Doctorate Regulations have no rules);
2. Compliance with rules for the research is indicated on a separate page of the thesis (an elaboration of Article 5 and extending Article 16, paragraph 6, to the monograph); and
3. For the size, it is recommended not to exceed 106 thousand words (all inclusive) too far (the Doctorate Regulations have no rules).

We elaborate on these issues below.

1. Publication status

Normally, part of the research work reported in the thesis has been presented to the public in some way (e.g. by a presentation at a scientific conference); however, it is not required that any part of the work has been published in an academic outlet.¹³

If the intention is to publish portions of the thesis in the form of one or more single articles, you can structure the thesis so that (parts of) the individual chapters can be easily converted to an article

¹⁰ On November 17, 2017, the board of Netherlands Institute of Government (NIG) summarized the key similarities and differences in NIG members' PhD regulations, among these the then FSS rules. The board concluded: "Where a PhD is based on articles, it is almost always required that the articles were published no more than five years before the time of the thesis defence." We believe that instead of formulating a quantitative criterion, it is better to formulate a substantive criterion. This criterion has to be evaluated by the supervisors and the Doctorate Committee.

¹¹ Article 11.

¹² Article 18. Thus, the thesis may be written in Dutch. Because academic discussion often takes place in English, academic literature is often published in English-language books and journals, and training is often offered in English, adequate proficiency in English is required by candidates at the time of admission.

¹³ It should be noted that for an academic career, it is often considered an asset to have published in scholarly journals or through books from a reputable academic publisher.

later. In the process of peer review, it is possible that the text to be published may end up being very different from the original chapter that was included in the defended theses.

Alternatively, a chapter can be worked towards publication while the monograph is being written. If this is, for example, a chapter with empirical results, then it is necessary to make the chapter independently readable by adding a theoretical introduction and discussion, and a methods section. As an example, a chapter that reports on a specific case seems appropriate to be published independently as an article. For such a chapter we recommend following the guidelines for an article in an article-based thesis in this case.

A monograph may also include a preliminary study, which is related to the main study reported in the monography but has been published as an article. Again, for such a chapter we recommend following the guidelines for an article in an article-based thesis.

2. Compliance with rules for the research

The thesis includes a page with justification for authorship and the results of the ethics review.

3. Size of the thesis

If the thesis is a monograph, a comprehensive and as complete as possible discussion of a specific topic shall be provided. The different chapters discuss different aspects of the research. In the report of an empirical study there are chapters in which the research problem is introduced, theoretically justified, the data collection and data processing are justified, the results are presented, and the outcomes and working method are discussed. Table 1 presents data on the size of theses approved and defended in FSS.¹⁴ The median data may well be used as a guide. The recommendation is not to exceed the median page count (about 106 thousand words, all inclusive) too far, but there is no fixed, absolute limit.

Specific rules for an article-based thesis

Supplementing or clarifying the Doctorate Regulations the rules are:

1. The PhD candidate is first author of each article (extending the Doctorate Regulations and strengthening the independent position of the candidate – addressed in Article 16, paragraph 1, and Articles 21, paragraph 1);
2. ‘Almost’ single authorship is expected for the synthesis, but not expected for articles (elaboration of Article 16, paragraph 1, and Article 21, paragraph 1);
3. Supervisors but also other researchers may act as co-authors; it is good practice to make appointments at the beginning of the writing (elaboration of Article 16, paragraph 5);
4. The thesis has a minimum of three and a preferred maximum of five articles (the Doctorate Regulations have no rules);
5. The synthesis describes the coherence and adds to the articles; if the articles are already rich in content and strongly related, the synthesis need not rise far beyond them (elaboration of Article 16, paragraph 5);
6. It is not necessary for any article to have been published or submitted (the Doctorate Regulations have no rules);
7. Compliance with rules for the research is explained on a separate page of the dissertation (Article 5 and Article 16, paragraph 5); and
8. The size of articles follows what is customary in journals (the Doctorate Regulations have no rules).

We elaborate on these issues below.

¹⁴ The mean duration of the 32 projects, i.e., the time between the start and the defense and graduation, resulting in these theses was 6.5 years.

1. First authorship

In FSS the PhD candidate is first author of each article.¹⁵ One reason for a candidate's first-authorship is to protect the results of her or his work; other authors may have an interest in their first-authorship (for example, in some disciplines the number of publications as first author is important for the assessment of the quality of a publication list¹⁶). In order to prevent co-authors from taking their hierarchical higher position for granted, the outcome of any discussion about authorship should be in agreement with the clear principle of the PhD candidate being first author. A second reason is that candidate's first-authorship means that the candidate takes responsibility for the entire article as it is part of the thesis and it also indicates that the candidate is the one who was in charge, both in terms of content and methodology.

The candidate's first-authorship is in accordance with the APA 2017 ethics code¹⁷, for example. This code acknowledges the possibility of an exception 'under exceptional circumstances'. In such a case, before writing the article, the candidate and the supervisor need written permission from the dean, assisted by the GSSS director as authorized representative, to make an exception. An exception to the rule that the candidate is the first author is when the candidate is the second author and the first author is also a PhD candidate and the article is also included in the thesis of this first author. This situation is referred to in the thesis as 'shared first-authorship' and does not need permission. A second exception may be that scientific work published before the start of the thesis (and not based on the bachelor or master thesis) is intended to be included in the thesis. This situation is very rare at FSS, and can be discussed at the time of the application as a candidate.

Some may object that there are good reasons to accept that in the learning process of writing a thesis and in the training to become an independent researcher, the role of the candidate is more limited, especially at the beginning of the trajectory. We agree. However, we assume that the attribution of first authorship to the candidate need not follow logically from the guidelines used to determine authorship and the order of authorship of senior researchers. Moreover, it is generally accepted that being the first author does not mean that this author is leading in all aspects of the research. For example, according to Burman (1982)¹⁸, the first author (planned and) conducted the study, evaluated the data, and wrote the article, the principal investigator (PI) planned and supervised the study and the writing of the article, and other authors participated substantially by either doing or supervising any stage of planning, execution, data analysis, or writing. In this way of working, the supervision of writing can also include the editing or revising of a draft, and co-authors can also do what their label tells them to do, i.e. co-write.

¹⁵ This does not alter the fact that the candidate may also be a co-author of work created during the PhD research period, but then that article will not be included in the thesis.

¹⁶ The common practice of author sequencing for multi-author articles differs somewhat between the FSS disciplines. In all disciplines, authors may be listed in order of relative contribution, but it also happens that the alphabetical order is often used (especially when authors have equal contributions). In anthropology, multi-author articles are not common. Source: Onderzoek Publicatieculturen NWO-MaGW, 2013, page 42-48. Thus, when alphabetic order is the most common practice of author sequencing for multi-author articles in a specific discipline, we require a different order for an article in a thesis, i.e., the candidate is the first author.

¹⁷ Standard 8.12, www.apa.org/gradpsych/2006/01/cover-code; www.apa.org/ethics/code (visited December 21, 2020): "Except under exceptional circumstances, a student is listed as principal author on any multiple-authored article that is substantially based on the student's doctoral dissertation. Faculty advisors discuss publication credit with students as early as feasible and throughout the research and publication process as appropriate."

¹⁸ Burman, K. D. (1982). "Hanging from the masthead": Reflections on authorship. *Annals of Internal Medicine*, 97, 602-605. doi: 10.7326/0003-4819-97-4-602. Note that in various disciplines the PI is the last author. However, in social sciences the PI is often second author, and there is a decreasing contribution for the third and subsequent author. Source: Onderzoek Publicatieculturen NWO-MaGW, 2013, page 17.

2. *Single authorship*

In some disciplines it is customary to publish as a single author. Sometimes this is also of great importance for the academic career. By means of single authorship, a PhD candidate shows that she or he can carry out research independently. Usually this is in an advanced phase of the trajectory. The supervisor agrees with the subject of the relevant sub-study and guarantees that the article fits in with the thesis. For the rest, the supervisor is at a relatively large distance: she or he supervises little and has a role similar to that of, for example, other colleagues in the department. A supervisor cannot claim the right to be a co-author.

However, it may also be customary – regardless of the relative contribution of the supervisor – to decide that in principle all articles are co-authored with the supervisors, obviously as long as the requirements for co-authorship have been met (see elsewhere in this document). In this way, for example, a relatively large contribution from the supervisor to an article written at the beginning of the trajectory can be compensated. Such an appointment must be made at the beginning of the process, and recorded in writing. However, this procedure is not the most desirable because it gives little flexibility and prevents an ethically desirable discussion about authorship at the start of a new article.

3. *Co-authors other than the supervisor for the articles*

When collaborating with researchers other than the supervisor, these fellow researchers may also be co-authors, obviously as long as the requirements for co-authorship have been met (see elsewhere in this document). An article with the candidate as the first author, other researchers as co-authors, and the supervisor not being a co-author, is most likely in an advanced phase of the trajectory.

4. *Number of articles*

If the thesis consists of a compilation of separate scientific articles¹⁹, the thesis shall comprise a minimum of three and a preferred maximum of five articles.

Specifying a minimum of three articles is necessary because it is plausible that in a learning process it is likely that in the beginning a relatively large amount of supervision is needed, and it is unlikely that with a small number of articles it can be sufficiently demonstrated that a candidate is able to do independent research. When the thesis contains three articles, it is therefore necessary that the supervisor provides sufficient evidence for this ability. It can be taken into account that one or more extensive data collections have been designed and executed. Alternatively the three articles are of a really high quality, unusual be varied and each making a distinct contribution (and still to be part of a coherent thesis, and as a collection being more than the mere sum of their parts), or above-average rich in content. The supervisor should explain this in the portfolio.

We strongly recommend a maximum of five articles, for various reasons. (i) To write an excellent thesis it is not necessary to write more than five articles; it is much more important that each of the articles is of excellent quality. (ii) When designing the PhD project, the supervisor and candidate should discuss how the research question will be answered. Also comprehensive questions can be answered with five articles and thereby neither a candidate nor a supervisor should feel pressured to produce and supervise, respectively, more than five articles. A feasible plan for a PhD trajectory is highly recommended. (iii) Some candidates are both good and fast in their work, and can write many more articles in the usual time for a PhD project; at a limit of five articles, they can obtain a PhD earlier and use the remaining time of their project to publish more work or do other research activities, or alternatively, they can obtain a PhD within schedule and show in their curriculum vitae in the thesis that they have published more articles than were included in the thesis. (iv) The assessment of a thesis requires a lot of time from the supervisor, as well as from the members of the Doctorate Committee; reviewing more than five articles is not necessary to assess whether the candidate will receive the doctoral degree, and is therefore undesirable over-questioning their willingness to do their review. There may be other reasons, or more urgency for one of the four mentioned reasons, to have more than five articles included in the thesis. If the supervisor and the candidate want to include more

¹⁹ Article 16, paragraph 1.

than five articles, they discuss why more than five articles should be included in light of the four points raised above. If completion of the thesis within the deadline agreed upon at the start of the project does not seem feasible, the number of articles will be reduced to five or four. If both parties have agreed to include more than five articles, the supervisor needs to include a statement in the portfolio why more than five articles are warranted with reference to the above mentioned points.

5. *Coherence in the article-based thesis*

While a monograph is written as one coherent scientific report, the articles in an article-based thesis consist of separate reports of pieces of research. It is required that the candidate describes the coherence of the thesis, i.e., the interrelationship of articles.²⁰ The coherence is described in two separate pieces ('General introduction' and 'General discussion')²¹ or in one introductory piece (for example entitled 'Synthesis'; from now on, we will use this term as a common denominator for the thesis sections that describe coherence).

In a minimalist view the synthesis becomes a 'dressed up table of contents' or an extended summary, but it needs somewhat more: an overarching research question is formulated and it is indicated how this general research question is answered in the various articles. Dependent on what is presented in the articles following or preceding the synthesis, an account of previous research relevant for the thesis' topic is presented, the general research question should be placed in a broader, theoretical framework²², and an overall discussion on the results of the various empirical articles in the context of the general research question and the contribution to scientific knowledge should be added. Thus, it includes the summarizing and synthesizing of the research topic and of the conclusions presented in the articles. Usually the synthesis provides a thorough account of the research methods applied in the thesis, including a description of the data and source material.

Describing the cohesion can be done in many ways. The synthesis must demonstrate that the candidate has sufficient knowledge and mastery of the field of research central to the thesis and meets the requirements²³ – in so far as this has not yet been proven in the articles. With regard to the independent reasoning, it is preferable that the contribution of the supervisor to the synthesis is relatively limited.

6. *Publication status of articles*

The articles may be published, approved for publication²⁴, submitted for publication or unpublished.²⁵ This means that it is not necessary for any article included in the thesis to have been published in a scientific journal or any other scientific medium, or even submitted.²⁶ It is not

²⁰ Article 16, paragraph 4.

²¹ The regulations say: "... an introductory or concluding chapter."

²² Because each of the individual articles already contains a theoretical section, it is not necessary that the theoretical section in the synthesis be so extensive as is usual in a monograph. However, this is the place to present a more thorough presentation of the theoretical background than the regular article format allows.

²³ Article 21.

²⁴ The candidate shall not make any changes to an already published or accepted article included in the dissertation, and shall not make any changes to an article in the dissertation that has been submitted to the supervisor and the Doctorate Committee – even if the article in the dissertation was later revised and accepted by a journal. However, typos and other minor errors may be corrected. If the candidate feels that certain aspects of an article included in the thesis need further discussion, this should be done in the synthesis.

²⁵ In general, it is plausible and good that scientific work is published in a scientific journal or an edited volume published by a reputable academic. However, in the interest of the limited time available within PhD trajectories we want to avoid requiring the publication of articles, forcing the candidate to spend a lot of time on the publication instead of completing the thesis in time.

²⁶ A funding agency or other party interested in the research cannot demand (i.e., make it conditional) that results of the research be published outside of the thesis in scholarly articles. If a third party allows the research to be conducted for the purpose of writing a PhD thesis, then that interest should come first, subject to the rules of FSS. (It is not appropriate to address here whether other products may be required, such as a report to the sponsor of the study. However, it is not evident that these tasks will be part of the thesis trajectory, and it

intended that an individual supervisor sets a benchmark for the number of publications and their status as necessary for dissertation approval^{27,28} (see also Appendix 1). However, the thesis must reach a quality level that merits publication as part of the literature in the field; the final attainment levels and the assessment procedure using the rubric are aimed at this.

The publication status is included in the thesis, as a footnote to the first page of the article. For example it is reported that a revised version of the article included in the thesis has been accepted (or already published). This documentation must be in accordance with regular standards of academic referencing (e.g. APA) including a DOI.

An article published in a peer-reviewed journal can be expected to be of sufficient quality. However, even if one or more or all of the articles have been published in peer-reviewed journals, it is important that the supervisor and the Doctorate Committee make an independent judgment about the thesis, equivalent to the situation where none of the articles have been published.

7. Compliance with rules for the research

Each article includes a footnote²⁹ with justification for authorship, the publication status when the article is submitted, accepted or published, and the results of the ethics review.

8. Size of the thesis

Guidance for the size of an article: the text is around 7000 words (usually between 5000 and 10000 words, excluding abstract, tables, figures, references and supplementary materials), but a reasonable

is the supervisor's responsibility, not the candidate's, to ensure that such contractual arrangements are met.) It is the inalienable right of the university to set requirements for the thesis independently of third parties, and to organize itself (and not, for example, the editor of a journal) the process of assessing quality. Conversely, this also means that if some or even all of the articles of the thesis have been published, the thesis need not automatically be of sufficient quality.

²⁷ Agreements made between supervisor and candidate at the start of the program may not deviate from the rule on publication status. An example of violating the rules is agreeing that the supervisor will only approve the thesis if a minimum of two articles have been published or accepted. There is no objection to indicating the intention to publish and making room for this in the planning. It may seem at the outset that it is in the candidate's best interest to write and publish scholarly articles during the thesis research, but at that point other interests – such as finishing in time –, which later prove to be conflicting, may not be properly weighed. Nor can it be the case that submitting and subsequently honoring an application for a grant of scientific research, which includes PhD projects, to, say, NWO, creates an obligation to admit a PhD candidate with a qualitatively adequate dissertation to the defense only after a journal has accepted an article, or that even four committed articles have been published. Of course, the granting organization will appreciate it if publication has taken place, and the candidate and supervisors make efforts to achieve publications within the project timeframe.

²⁸ Several Dutch academic institutions discuss the need to publish articles. We give some examples in an end-note. Although there is pressure to publish, also from the interest of the institution, in these examples it is not said that a thesis without publications is insufficient. The FSS opinion is the following. For an academic career, it is often considered an asset to have published in scholarly journals or through books from a reputable academic publisher. If a choice has to be made between a thesis completed in four years and from which several articles have been published, and an equivalent thesis also completed in four years without publications, most PhD candidates, supervisors and members of the Doctorate Committee are likely to choose the one with publications. Incidentally, this does not necessarily mean that the thesis without publications is of insufficient quality. There are several reasons for not requiring that a thesis have (accepted or) published articles: (–) A monograph without any publication is also acceptable; (–) There may be other outcomes of thesis research, such as special data collection or extensive valorization; the latter also reflects that many PhD graduates do not pursue an academic career; (–) As indicated above, FSS appointed scientists, and not unknown reviewers and editors, judge the quality; (–) The comparison mentioned above between a thesis with and without publications is only valid if the thesis is completed within the time agreed upon at the beginning of the project; if the latter is not achievable, timely completion should be a priority.

²⁹ Update: the VU Doctorate Regulations dated July 15, 2021 requires to add “a page to the dissertation containing a list of references with, for each article, an overview of the authors and an explanation on the contribution by the co-authors” (Article 16).

size and precise prescription follow what is customary in journals characteristic for the field of research. Table 1 presents data on the size and composition of theses defended in FSS. The median data may well be used as a guide.³⁰

³⁰ In addition to the median, for the composition of the 54 article-based theses the mode is two chapters describing the synthesis and four articles, of which two are published, followed by a thesis with two chapters describing the synthesis and four articles, of which three are published. However, together they count for 21 of the theses only. Seven theses had four or five published or accepted articles and five theses had no published or accepted articles at all. The mean duration of the projects, i.e., the time between the start and the defense and graduation, resulting in these theses was 6.0 years.

Table 1. Theses defended in FSS in 2017-2020 by number, form, size and being published

Department ^a	Theses	Monograph					article-based										
		N	N	Pages ^b		Words ^c		N	Pages		Words		Articles				
				M ^d	Range	M	Range		M	Range	M	Range	Published ^e				
														M	Range	%	Range
B&P	14	6	283	213-360	64	43-78	8	172	107-258	64	43-78	4,5	4-6	1	0-3	25	0-75
CW	10	0					10	196	128-298	56	45-77	4	3-5	2	1-3	50	25-75
ORG	19	6	270	210-318	99	64-108	13	209	156-369	68	37-83	4	3-6	2	0-5	67	0-83
SCA	17 ^f	15	302	223-617	115	80-290	0										
SOC	28	5 ^g	236	137-434	94	43-116	22 ^h	180	97-272	59	45-86	4	4-7	2,5	0-5	50	0-100
All	88 ⁱ	32	281	137-617	106	43-290	53	194	97-369	60	37-86	4	3-7	2	0-5	50	0-100

^a B&P – Political Science & Public Administration; CW – Communication Science; ORG – Organization Sciences; SCA – Social and Cultural Anthropology; SOC – Sociology

^b Number of pages and number of words are all inclusive, i.e., with cover, title pages, contents, scientific content, tables and figures, summaries, references, appendices (including for example questionnaires, report of additional analyses), foreword, personal acknowledgements such as a ‘thank you’, empty pages and other parts

^c x 1000

^d M = median

^e Published includes accepted for publication and online access prior to publication

^f Two theses are not available in the library or are embargoed³¹ until the year 2050. Manuscripts have been available in Hora Finita since mid-2018

^g One thesis was a combination of a published article on a preliminary study and chapters on the main research

^h One thesis is embargoed until the year 2050, and had a missing chapter in the library

ⁱ Six monographs and one article-based thesis were written in Dutch; all others were in English

³¹ The conditions under which an embargo is possible, and the procedure used in doing so, are under further review by FSS.

Appendix 1

We present publication practices within PhD projects at some departments at other Dutch universities.

In their PhD Study guide of 2014, the Graduate School of Medical Sciences of the University of Groningen at the University Medical Center Groningen states (p. 20): “The protocol given above does not mention an obligation to have (parts of) the thesis published and/or submitted/accepted for publication prior to the thesis defence. Also, there are no specific requirements with regard to the number of (experimental) chapters nor the size (the number of pages) of the thesis. However, since the PhD title is given as ‘proof of being an independent researcher’, it is clear that the manuscript should show sufficient indications that the candidate has mastered the entire cycle associated with performing scientific work. This includes the writing and, preferably, publication of research papers. As a rule of thumb the UMCG considers a thesis containing an introduction / outline of the thesis, two published / accepted / acceptable experimental chapters and, preferably, two additional (experimental) chapters as appropriate. However, as said before, in principle there is no absolute requirement for publication to be admitted to the thesis defence, nor for obtaining the PhD degree. A PhD student must finish the manuscript of the thesis within the allotted time period.” (www.groningenbiomed.com/uploads/fckconnector/34f3049f-3abf-4547-9880-534324fdf7c2, retrieved February 12, 2021)

On November 17, 2017, the board of Netherlands Institute of Government (NIG) summarized the key similarities and differences in NIG members’ PhD regulations, among these the then FSS rules. From the ten institutions, only Tilburg University had a rule on the publishing articles: “Minimum of four articles, subjected to peer review (three of which have been accepted)”. The other nine did not formulate a rule, or left the decision to the PhD candidate and the supervisors.

The Amsterdam School of Communication Research (ASCoR) of the University of Amsterdam gives the following publication guidelines: “PhD research projects should ideally result in a number of publications based on the dissertation. The results of the literature study and the experiments are reported in research articles, to be published in peer-reviewed journals and journals registered in the Social Sciences Citation Index (SSCI) – preferably in the field of communication science – or as (chapters in) books published by academic publishers. These publications form the basis of the dissertation. This does not mean that every chapter in the dissertation has to be accepted for publication before the dissertation defense. Typically, at the end of a PhD project one or two chapters of the dissertation will have been accepted for publication, whilst most of the other chapters will have been submitted for review. (...) Priorities. The PhD dissertation is always the first priority for any PhD project at ASCoR. As ASCoR dissertations usually consist of multiple journal articles or peer-reviewed book chapters, ASCoR also explicitly promotes the publication of individual papers resulting from PhD projects in (international) academic outlets. These priorities are in line with the criteria underlying the ASCoR Research Program, and the criteria commonly upheld by the academic community. A successful career as a senior academic researcher strongly depends on academic publications, as they play a very important role in applications for senior research positions at universities, and in applications for research funding from science foundations such as NWO. This is linked to the fact research budget such as ASCoR’s are determined to a large extent by publication scores, both directly by the University, and through external review processes such as those within the national science organization, NWO, and accreditation organizations such as KNAW and VSNU. As a result, publication scores have a strong impact on ASCoR’s ability to finance research activities – including conference visits, data collection, and PhD projects.” (https://wiki.uva.nl/cw-wiki/index.php/Publication_guidelines:_PhD, retrieved February 12, 2021).