

Cumulative versus monographic dissertation

General

- Any PhD thesis, whether written as a monograph or as a cumulative thesis comprising several peer reviewed papers, is being examined on the basis of its scientific merits. There is no difference in scientific quality per se between these two formats. The PhD rules and regulations treat them equally.
- Basically the number of publications in cumulative dissertations is not an indicator of the scientific quality of the thesis. Nevertheless, according to section 9, subsection 3 of the current Doctoral Degree Regulations at least two of the publications must have been published or accepted for publication in peer-reviewed, internationally recognized journals. The doctoral candidate must have made a significant contribution to at least two of the publications; none of the work submitted may be the subject of another doctoral thesis in a current or completed doctoral examination process of the doctoral candidate. The work must be prefaced by a detailed overview, offering a critical assessment of the research topics and key findings of the papers submitted in the context of the academic literature on the topic and, if applicable, should appraise the doctoral candidate's own contribution as well as the contribution of the other authors of the individual papers.
- Individual supervisors might set additional benchmarks reg. the number of publications and their status (published, accepted, submitted) for their PhD students. However, these are not based on the Faculty's PhD rules.

Benefits of a cumulative dissertation:

Future career

When it comes to job applications, peer-reviewed publications are often regarded as superior when compared to monographic dissertation. This applies at least for the area of natural sciences. In social sciences it might not always be the case.

With a cumulative dissertation, you demonstrate to a future employer that you know how to communicate and publish your work. You demonstrate competency to the outside world.

Accessibility and Visibility

If your audience is a scientific one, your work is more accessible and you reach a much greater level of dissemination than with a monograph.

Content and quality

In a cumulative dissertation you are pushed towards an efficient risk and time management. You should aim for at least 1 publication per year. Commonly the quality of the dissertation improves through the critique and feedback received from reviewers and editors in the peer-review process.

Examination

Examiners of a thesis will commonly assume that chapters of a thesis that have been published as peer-reviewed papers have already undergone a very critical examination and scrutiny.

In which cases may cumulative dissertations not be recommendable?

1. If the main readership of your dissertation does not read scientific journals.
2. If most of the results of your work are obtained only at a late stage of your candidature, e.g. in the 3rd year. Then it would very probably substantially delay finishing your thesis, if you wanted to get chapters still to publication or acceptance stage. Therefore, it is very important to consider a publication plan. If you cannot

develop the majority of your results chapters to an accepted stage during the anticipated time for your PhD, then it may not be worthwhile to attempt writing a cumulative thesis.

What to do if your work is not suitable for the cumulative format?

If your work is not suitable for a cumulative dissertation, but you want to publish your work in scientific articles, you should structure your thesis so that individual chapters can be easily translated into papers later on.

Duplication of publication

If you publish your dissertation as a monograph and want to publish later also chapters of it as individual papers in journals, you enter a grey zone. It very much depends on your audience and the publisher of your monograph. Here you might have to seek permission to publish the same or similar content again. However, through the peer-review process it is quite likely that in the end your text to be published differs a lot from the original.

If you want to be on the safe side: Submit the required minimum number of copies of your dissertation and publish the content later in journals.

When to decide?

You should decide at a very early stage if you want to go for a cumulative thesis or a monograph format. Discuss this very important issue with your supervisors. If you decide at late stage of your candidature to change the format from monograph to cumulative, this might cause a lot of additional work.

Requirements of the PhD regulations (2008) for cumulative dissertations

The regulation does not fix a certain number of publications. It just says “

§ 6

(4) Die Dissertation kann mit Zustimmung der Betreuerin / des Betreuers und der / des Vorsitzenden des

Promotionsausschusses als kumulative Arbeit eingereicht werden. Dabei sind mehrere wissenschaftliche

Veröffentlichungen und / oder zur Veröffentlichung angenommene bzw. zur Veröffentlichung eingereichte

Manuskripte zu einem Rahmenthema gemeinsam mit einer schriftlichen zusammenfassenden Darstellung der

wichtigsten Inhalte gebunden vorzulegen. Eine kumulative Dissertation muss einer als Monografie eingereichten

Arbeit voll entsprechen und ist nach denselben Kriterien zu beurteilen.