A survey of doctoral candidates in Norway

English summary

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The purpose of the report is to provide an updated picture of what it is like to be a PhD candidate (the formal term for a doctoral student) in Norway in the spring of 2017, and to compare developments over time. To do this, we have collected data from a questionnaire that was sent to all doctoral candidates who were admitted to a doctorate program in a Norwegian higher education institution in the autumn of 2016 (ca. 8300 persons). In total, 3864 responded to the survey (response rate of 48 percent), and the sample is representative of the population as a whole. We also draw upon data from a national registry of PhD candidates, and compare results from this survey with a prior study among a similar sample of PhD candidates from 2009.

Main results of the survey

High degree of satisfaction with researcher training in Norway

Key aspects of the research-training situation for PhD candidates are investigated in the study, such as supervision, education, and support and follow-up of PhD candidates. The analysis shows that the majority of candidates have at least two supervisors and that they are reasonably satisfied with the supervision received. Only one in ten is dissatisfied with the supervision.

The majority (six of ten) are also pleased with the training component of the PhD degree, and candidates associated with research schools are somewhat more satisfied than candidates that are not part of research schools. Still, a significant minority (about two of ten) is dissatisfied with the education offered at PhD level.

Today’s doctoral candidates are also monitored, assessed and supported in an adequate manner. The survey confirms the earlier impression that most institutions and doctoral programs in Norway have taken measures to follow up progress and provide feedback to the candidates during the doctoral study.

Research ethics – training is widespread and few experience problems

The survey shows that training in research ethics is widespread (nine out of ten) among PhD-candidates in Norway. Relatively few have experienced pressure to participate in activities or situations that they regard as ethically wrong or problematic during the PhD period. The exception is that a considerable number of PhDs experienced problematic situations related to co-authorship, especially in the fields of medicine and health sciences and within natural science and technology.
Employment contracts and work duties among research fellows

It is still most common for research fellows (in Norwegian “stipendiater”) to have a four-year employment contract with so-called duty work on top of PhD research work. In some subjects and at certain types of institutions, three-year contracts are more frequently used. At the same time, four out of ten research fellows without formal obligations to do duty work report that they perform tasks outside their own research, and three out of ten research fellows spend more time than agreed on duty work.

Research fellows who are not Norwegian citizens are more often employed in three-year positions, even in subjects where four-year positions are most common, and they report more often than Norwegian citizens do, to perform duty work without having such obligations in their employment contract.

Research fellows mainly work independently - but those who are affiliated with a group have more positive assessments of the doctoral period

Being a PhD fellow is usually associated with independent and at times lonely work. In this sample, the majority of research fellows state that they work independently, but that they are affiliated with a larger research group or research project. Previous surveys have shown that PhD fellows who work with or collaborate with others are more satisfied and accomplish more during the PhD period. This result is also confirmed in this survey. The group of PhD fellows working alone reports to be less satisfied with the working environment, supervision, research training and administrative follow-up. They also experience less integration in the research community, and they feel less part of the social community in their departments.

One out of three are external doctoral candidates, and most of them are within medicine and health care

We have also looked at the group of PhD candidates who are not PhD fellows in the same institutions where they take the PhD. We refer to this group of PhDs as «external candidates». One in three doctoral candidates in the survey is an external candidate, and up to half of the external candidates belong to the subject of medicine and health care. In medicine and health care, the vast majority of external candidates (seven out of ten) are employed by a health trust. We also find many external PhD candidates in the institute sector, which is the second most common place to be employed for externals. Four out of ten of the external candidates have leave of absence from another position to complete the doctorate degree.

We also see that the majority of external PhD candidates report that the higher education institutions where they are PhD students support them in the same way as they do their own «internal candidates», but a significant minority does not (four out of ten). They also feel less socially and academically integrated in the research community. At the same time, the external PhD candidates are more satisfied with the PhD period (training, supervision, etc) although they, among other things, receive less supervision and support than internal candidates do.

Career ambitions among doctoral candidates - six out of ten aim at becoming researchers after graduation

The main finding is that fewer doctoral candidates than previously wish for an academic position in the university and college sector. In total, six out of ten want to work as researchers after graduation, but only three out of ten want an academic position in the university and college sector. There are significant differences between subject fields in terms of the career ambitions of PhD candidates. Candidates within humanities and the social sciences aim for positions in the university and college sector, while the minority of candidates in natural sciences, technology and medicine and health does so. They are more interested in future work in the applied research institute sector or in non-
researcher positions in the public or private sector. Two out of three candidates consider their future career prospects to be good. It is the candidates who aim for a non-researcher position in the public sector or the health sector who are the most positive to their career prospects, while those who want a research position in business are the most negative.

Six out of ten find that doctoral education is very relevant to the career they aim for. Doctoral candidates that aim for an academic position in the university and college sector, consider the degree to be most relevant. Candidates who aim for a position in the private sector experience the education as less relevant. Candidates within the humanities assess the training as most relevant for future careers followed by candidates in the social sciences and medicine. Norwegian citizens experience the PhD as more relevant for future work than foreign citizens. Overall, only two out of ten have received information about career prospects or career guidance during the PhD period.

Developments in Norwegian doctoral education from 2009 to 2017

The Norwegian system of PhD training has experienced a tremendous growth the last decade. The number of PhD candidates has doubled since the early 2000s and increased by approx. 20 percent in the period from 2009 to 2016. Half of the increase has occurred in health and medicine, but the share of candidates in this field has only increased from 26 to 30 percent. Most doctoral candidates are still enrolled in programs at the older universities, especially the University of Oslo (UiO), NTNU and the University of Bergen (UiB). About as many women as men entered doctoral agreements in 2009 as in 2016.

By comparing the experiences of PhD candidates in 2009 and 2017, the study finds that PhD candidates today are slightly younger than before, the universities and colleges fund more candidates today, and more candidates have 3-year contracts. There are also far more foreign doctoral candidates than before. Doctoral candidates today also have more supervisors, they get more guidance and supervision, and they are more pleased with the supervision and support they receive.

Fewer doctoral candidates aim to become academics now than previously, and given that fewer doctoral students aim to work in academe, it may not be surprising that fewer experience the doctorate as highly career-relevant. At the same time, fewer PhDs find that they have poor career prospects, but that this still varies considerably with subject fields and career ambitions. The universities and colleges that offer PhD programs, on the other hand, do not appear to have become better at providing information and guidance in career development issues for PhD candidates.