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Doctoral Education and the Doctoral Faculty Supervision in Poland

(Forthcoming in: *The Making of Doctoral Supervisors*, edited by Stanley Taylor, Margaret Kiley and Karri Holley, Routledge: London and New York, 2020)

Introduction

Under the communist regime in Poland, the number of doctoral students was low, supervision followed the traditional model in which doctoral students worked closely with their supervisors, and completion rates were high. However, following the collapse of communism in 1989 there were three significant developments.

Firstly, there was a massification of higher education in general and doctoral education in particular. The number of doctoral students grew very rapidly from 1990 to 2006 before stabilizing (see Kwiek 2013; Kwiek and Szadkowski 2018). By 2018, there were in all 39,000 students studying for doctorates in Poland, which was 15 times the total in 1990.

Secondly, this dramatic expansion of student numbers was not accompanied by a corresponding increase in the number of academics, which rose by only half. This had serious consequences in terms of the burdens of faculty supervision and hence the quality of doctoral education.

Thirdly, while thousands of extra students entered doctoral education, only a small minority gained their doctoral degrees; many either quickly dropped out or successfully completed their programs but never wrote and defended their dissertations (NIK 2015). So, despite the massive increase in doctoral students from 1990 to 2018, there was only a two-fold increase in the numbers of doctoral graduates from 3,700 to 5-6,000 annually.

The combination of increasing numbers of doctoral students, slowly increasing numbers of academic staff, and falling completion rates over the last three decades are critical to understanding the evolving role of doctoral supervision in Poland and the current point of arrival: the nation-wide introduction of institutional-level doctoral schools as of October 1, 2019.

The national context

The national context of doctoral supervision in Poland explains how and why doctoral education differs from the one offered both in Western Europe and in the United States, being at the same time heavily influenced by these models.

First, as in other European countries such as Germany and France, there are two doctoral degrees in Poland, the PhD and the higher doctorate or ‘habilitation’. In the context of an academic career, the PhD can be viewed as merely an entry ticket for initial employment as an assistant professor. The habilitation is required to become an associate professor, while to become a full professor requires further research achievements and meeting additional conditions including the successful supervision of at least one doctorate holder. In 2018, the habilitation could be awarded by 647 of the approximately 1000 faculties in Polish universities (POLON 2019).

Second, the PhD is widely offered in the system: in 2018, 90% of the faculties were eligible to run doctoral programs. However, such programs are provided almost exclusively by public sector institutions. Private institutions are, with a few notable exceptions, not eligible to provide doctoral education (see Antonowicz et al. 2017; Kwiek 2018b). In fact the public sector enrolls 93% of doctoral students and awards more than 95% of doctoral degrees, and for that reason this chapter focuses only on the public sector.

Third, doctoral supervision has traditionally been provided by individual professors rather than supervisory teams. Even though a traditional policy of using only main supervisors has been revised recently, and an option of an additional supervisor added, team doctoral supervision is an exception. However, the introduction of doctoral schools is bound to change the dominating pattern in the coming years, with ever increasing numbers of team supervision.

Fourth, a fundamental change in thinking about doctoral education, and consequently about doctoral supervision, occurred in the last 30 years. While prior to 1989, the objective of doctoral education was to train future academic scientists, after 1989 its objective became blurred. It has been unclear where doctorate holders would be seeking jobs and what their final destination in the labor market should be. In addition, it has been unclear to what extent doctoral students are third-cycle students (as promoted across Europe within the Bologna Process) and to what extent they are young academics, more similar in their status to academic faculty than to students (Szadkowski 2014). The unclear status of doctoral students and their undefined labor market destination heavily contributed to the failure of doctoral education in Poland and to its current reform. At the moment, Poland is in a transition period in which the old-type doctoral education continues and the new-type doctoral education, based on newly opened doctoral schools, begins its operation, with two types of education and two types of doctoral students, separately funded, working alongside within the same institutions. The transition period will last three years: by 2022, all doctoral students

not enrolled in new doctoral schools will either drop out or graduate, with powerful implications for the dominating supervision roles and the gradual standardization of their duties, obligations and rewards. The incorporation of doctoral education into institutions' centralized activities will change faculty supervision beyond recognition, and doctoral education policies will become an ever more important part of overall institutional policies as new funding will become available on a competitive basis.

Fifth, there is no explicit separation between a period of coursework and a period of independent research in the form of dissertation writing (as in many countries, including the USA). Doctoral students are expected to focus on their dissertations from the very beginning, with a culmination after the official opening of the dissertation procedure, usually in the middle of doctoral studies, that is after two years. The teaching part of doctoral studies is usually weak and major efforts are directed towards individual collaboration on the dissertation with the supervisor. Apart from limited numbers of elective lectures and seminars, a major form of collaboration with the doctoral supervisor is through a doctoral seminar and individual meetings.

Poland introduced the Bologna tripartite system of studies, with bachelor, master's, and doctoral studies in 2005. Polish academics found it difficult to accept massive (rather than traditionally elitist) doctoral education in the 2000s and 2010s – no longer leading almost exclusively to academic jobs, as in the decades past. The massive inflow of doctoral students to higher education institutions was powerfully supported by financial mechanisms: the more doctoral students institutions had, the better financially off they were, within some limits. In particular, Polish institutions heavily increased the number of doctoral students in low-cost areas such as humanities and social sciences (Białecki and Dąbrowa-Szeffler 2009).

As shown elsewhere in more detail (Kwiek 2020), the massification of doctoral education did not lead to the massification of the doctoral degree. This distinction is key in understanding the emergent tensions linked to doctoral education and doctoral supervision, based on international comparative statistics on doctorate holders and their employment levels (OECD 2010; OECD 2018; Kwiek 2019), Poland does not seem to have an overproduction of doctorates; however, Poland may have overproduction in the sense of doctoral students who are unable or unwilling to write their dissertations.

One of the consequences of the massification of higher education (see Siemieńska and Walczak 2012; Kwiek 2017) unaccompanied by the massification of the academic profession was that the employment opportunities in academia for new doctorate holders were limited in the whole post-1989 period. This limitation explains why increasing numbers of doctoral students did not result in the proportional increasing numbers of doctorate holders. The motivation of doctoral students to have doctorate degrees was low— as the chances for academic employment were minimal and the remuneration in the academic sector was minimal. Also doctoral supervision lost its traditional purpose to train future academics if the chances to enter the profession were marginal throughout this time.

The traditional philosophy in which a small number of young future academics are intensively trained in research methods and methodologies by their academic supervisors was negated. The traditional Humboldtian bond between pupil and master in research was broken in the vast majority of academic fields and institutions; exceptions included top national research intensive faculties (predominantly in natural sciences) in elite universities (Kwiek 2012).

Massified, organizationally uncoordinated and underfunded at an individual level (with about a half or 47.55% of doctoral students having some financial support in 2017: one in four having doctoral scholarships and one in four having social scholarships, respectively, GUS 2018: 215), and perhaps most of all devoid of clear purpose, doctoral education has been drifting into the unknown. The majority of doctoral students have been combining doctoral studies with non-academic work (NIK 2015), and there have been growing uncertainties about how to teach masses of doctoral students and what to teach them. The prior ideal of doctoral students being heavily involved in research with their supervisors and of future doctorate holders as pupils replicating academic behaviors, norms and research orientation of their masters, no longer worked in a massified context. Doctoral studies have been perceived inside and outside academia as failing on all fronts.

In technical terms, there are over 200,000 people in the labor force involved in research and development, of which about 90,000 hold doctoral degrees (213,971 and 87,027, respectively). Focusing on doctorate degree holders and using the OECD classification of research and development personnel, 87.39% of Polish doctorate holders are employed in the higher education sector (including the Polish Academy of Sciences), 8.71% in the business sector, and 3.90% in the government sector and private non-commercial sectors combined (GUS 2017: 42). From a European comparative perspective, Poland is a large producer of doctoral degrees – which is not surprising considering the size of its higher education sector. About 123,000 new doctorates were awarded between 1989 and 2018.

Of more than 39,000 doctoral students in 2018, about 21,500 were female (55%) – and both the number and the share of female doctoral students have been steadily increasing since 2000 when the proportions of doctoral students by gender were exactly the opposite: 55% male, 45% female. The structure of doctoral studies by academic field is that the cheapest to run studies are most popular. Doctoral studies in Poland are tuition-free so that there is no other financial incentive for institutions in increasing the number of doctoral students than receiving higher per student subsidy from the state (subsidies being five times higher for doctoral students than for regular students).

About a half of all doctoral students in Poland are enrolled in humanities, social sciences, economics and law, that is, in the fields not related to STEM, or science, technology, engineering, and mathematics. The share of females in these non-STEM

fields is higher than in STEM fields, with female doctoral students comprising 62.05% in the humanities and 62.84% in social sciences, well above the share of female doctoral students in the whole population, and 51.52% in economics, and 54.72% in law. The number of doctoral students in technical sciences is widely reported to be too low (15.75% or 6,802, with 36.64% of females). STEM fields are underrepresented and non-STEM fields are overrepresented in doctoral education. The tensions between high numbers of doctoral students and low numbers of doctorates awarded can be seen through the distribution of doctorates by academic field. The biggest number of doctorates in 2018 was awarded in medicine and technical sciences— followed by humanities and social sciences; in all other fields, the number of doctorates was considerably smaller.

How are doctoral supervisors selected?

Doctoral supervisors need to be full-time members of the academic staff. While main supervisors must be internal to the institution in which a doctoral student is enrolled, there are no legal requirements regarding additional or second supervisors. As mentioned, the single supervisor model is the norm, and the supervisory team is the exception. In Polish institutions, there is no tradition of honorary, visiting, or emeritus staff to be employed; consequently, the rare cases of supervisory teams mean doctoral supervisors are internal to the institution. In general, there is no nationwide code of practice regarding doctoral education in general, or doctoral supervision in particular. This is surprising in the context of massive development of doctoral education, and massive participation of doctoral supervisors in the process of training doctoral candidates in the last decade.

Interestingly, doctoral supervisors are selected by doctoral candidates themselves; doctoral candidates make their official choices regarding supervisors only when they start their PhD dissertation opening procedure, usually by the end of Year 2 or in Year 3 of their doctoral studies (lasting 4-5 years, with funding for 4 years only). Although they need their scientific advisors while applying for their doctoral studies, these informal advisors become their official doctoral supervisors only when the official opening procedure takes place. Consequently, doctoral students can start their studies with advisors who never become official doctoral supervisors, which is not common but occurs. In the opening procedure, in front of the faculty council, doctoral students present the structure of their dissertations and the council officially appoints their doctoral supervisors. Interestingly again, supervisors can still be changed by doctoral students prior to the PhD defense procedure, with the approval of the faculty council.

The right to supervise doctoral students is reserved to senior academics, not necessarily full professors. However, becoming a full professor requires the supervision of at least a single doctoral student in the past. This specific *sine qua non* condition of application to become full professor for decades acted as a powerful gate-keeping mechanism (on Polish universities as the ‘republic of (senior) scholars’, see Kwiek 2015a and Kwiek 2015b). Doctoral students were internally allocated within faculties or departments according to the needs of academics willing and able to

become future full professors. Junior scholars can act as an additional or secondary supervisors and this right, given to them in the last few years, is not widely used. There are no explicit requirements to supervise doctoral students regarding research activities, publication records or research grants. There is also no explicit limit on the number of doctoral students that supervisors can supervise at any given time. However, supervising more than 3-5 doctoral students at one time is very rare and concerns exclusively top professors in their fields. It is important to note that doctoral students are scattered across the whole system so the concentration of doctoral supervision is rare.

There are important cross-disciplinary differences in selecting doctoral supervisors and doctoral students, especially between humanities and the natural sciences in which doctoral students can be employed as researchers within ongoing externally-funded research grants.

How are doctoral supervisors supported?

Doctoral supervisors still act as in the decades past and are not provided with support from their faculties or their institutions. There are no professional development programs for academic staff devoted exclusively to doctoral education or doctoral supervision. There are no formal or informal requirements to complete any program or training regarding the supervision. However, instead of completing programs or workshops on the subject, doctoral supervisors need to be senior academics.

Doctoral education is structured in all eligible institutions by the same key events: entrance exams for future doctoral students carried out at the level of faculties (rather than at the level of institutions); admission to a doctoral program; a PhD opening procedure; PhD final exams; a PhD defense procedure leading to a degree awarded the by the faculty council. Doctoral students' progress to degree completion is loosely monitored by the institution, and large numbers of doctoral students drop out or continue being enrolled in the program for many years without dissertation writing, especially in social sciences and the humanities.

Polish institutions have traditionally not had doctoral schools; doctoral students were selected, trained, and graduated within hundreds of faculties scattered across the whole higher education system. Consequently, no institutional coordinating units were formed, leading to lack of comprehensive institution-wide policies. Doctoral education operated at the lowest institutional level of individual faculties. This changed as of October 2019.

How are doctoral supervisors rewarded?

Doctoral supervision is not rewarded except for the right to apply for full professorship. Hours spent on mentorship and supervision of doctoral students count towards annual teaching loads – but the hours used in calculations of workloads are

marginal (usually 7 hours for a full year of doctoral supervision). Doctoral supervision have not been included in academic promotion policies so far.

Doctoral schools – a new model

Doctoral education in Poland has been systematically criticized in scholarly circles and in the popular press. Previous reform waves in 2005 and 2009-2011 did not change either doctoral education or its doctoral supervision model. However, in 2016-2018, a model emerged in which doctoral education was transferred to a new institutional layer of doctoral schools (see Mikołajczyk and Naskręcki 2017). Newly created doctoral schools take all the responsibilities previously attributed to faculty councils and new doctoral students were selected; since October 1, 2019 they have been educated and funded through centralized doctoral schools created at the level of institutions.

The total number of doctoral students will decrease in the coming years but all of them will receive doctoral scholarships at the level guaranteed by the Ministry of Science and Higher Education. It is assumed that in the next few years the total number of doctoral students will drop by 30 to 50% but finally all of them will be funded by the state through new centralized doctoral schools. The major difference is the coordination of doctoral education at the level of institutions: for the first time, it is the central administration which is able to coordinate the distribution of doctoral students across academic disciplines. Doctoral schools will provide collectively designed curricula for doctoral students which will include general subjects provided at the level of institutions and specialist subjects provided within faculties. The key events will be coordinated by the school— rather than being loosely structured and uncoordinated as in the past. The responsibility of doctoral supervisors will be towards doctoral schools, doctoral schools will be expected to prepare professional development plans for its students in close collaboration with doctoral supervisors and to prepare professional training for those new supervisors associated with them.

Overall, a traditional, somehow amateurish approach to doctoral education -which perfectly fitted a low scale of operation prior to the expansion – will be gradually replaced by a more professional, centralized, and rule-governed approach implemented through new doctoral schools across the whole system. Presumably, team supervision will become more widespread and the opportunities to internationalize doctoral education through international co-supervisors will be much more widely used. Also the issue of doctoral students being poorly supervised because of their full-time work outside of the higher education sector will be solved: doctoral scholarships are substantial and their level increases after two years of doctoral studies. No external work for doctoral students will be allowed, easing the work of doctoral supervisors.

Discussion and conclusions

Doctoral education and the doctoral supervision in Poland is in a transition period as is the whole higher education sector, with a new wave of reforms that were discussed in 2016-2017 and currently being implemented. The role of formalized supervision is

bound to increase together with the introduction of doctoral schools as an important part of the reform package. The number of doctoral students is expected to decrease by 30-50% in the next few years – a decrease which will likely not affect the number of doctorates awarded. Finally, doctoral students are selected to doctoral schools only which will clearly increase the scope of their supervision. Doctoral supervision, for the first time, will be organized and coordinated at the central level of institutions rather than at lower institutional levels of faculties or departments, as in the decades past. Perhaps for the first time after 1989 the chances of reforming doctoral education in Poland and increasing its generally low quality are high. All major aspects of faculty supervision are expected to change, following a systematic failure of the previous system inherited from the 1980s and never adjusted to the increasing participation in doctoral education.

Acknowledgements

The author wishes to acknowledge the support of the national Dialogue research program funded in 2019-2021 (Dialog contract: 0022/DLG/2019/10).

References

- Antonowicz, D., M. Kwiek, and D. Westerheijden (2017). 'The Government Response to the Private Sector Expansion in Poland.' In *Policy Analysis of Structural Reforms in Higher Education*, edited by H. de Boer, J. File, J. Huisman, M. Seeber, M. Vukasovic, D. Westerheijden, 119–38. New York: Palgrave.
- Białecki, I., and M. Dąbrowa-Szeffler (2009). 'Polish Higher Education in Transition: Between Policy Making and Autonomy.' In *Structuring Mass Higher Education: The Role of Elite Institutions*, 183-199, edited by D. Palfreyman and D. T. Tapper. London: Routledge.
- GUS (2018). *Higher Education Institutions and their Finances in 2017*. Warsaw: GUS (Central Statistical Office).
- Kwiek, M. (2012). 'Changing Higher Education Policies: From the Deinstitutionalization to the Reinstitutionalization of the Research Mission in Polish Universities.' *Science and Public Policy* 39: 641–54.
- Kwiek, M. (2013). 'From System Expansion to System Contraction: Access to Higher Education in Poland.' *Comparative Education Review* 57, no. 3 (Fall): 553–76.
- Kwiek, M. (2015a). 'The Unfading Power of Collegiality? University Governance in Poland in a European Comparative and Quantitative Perspective.' *International Journal of Educational Development* 43: 77–89.
- Kwiek, M. (2015b). 'Academic Generations and Academic Work: Patterns of Attitudes, Behaviors and Research Productivity of Polish Academics after 1989.' *Studies in Higher Education* 40, no. 8: 1354–76.
- Kwiek, M. (2017). 'A Generational Divide in the Polish Academic Profession. A Mixed Quantitative and Qualitative Approach.' *European Educational Research Journal* 17: 1–26.
- Kwiek, M. (2018b). 'The Robust Privatness and Publicness of Higher Education: Expansion through Privatization in Poland.' In *Towards the Private Funding of Higher Education. Ideological and Political Struggles*, edited by D. Palfreyman, T. Tapper, and S. Thomas, 90–111. New York: Routledge.
- Kwiek, M. (2019). *Changing European Academics: A Comparative Study of Social Stratification, Work Patterns and Research Productivity*. London and New York: Routledge.

- Kwiek, M. (2020). 'The Abundance of Doctoral Students and the Scarcity of Doctorates in Poland'. In *Doctoral Education at a Global Crossroads: An International Research Inquiry* edited by P.G. Altbach, H. de Wit and M. Yudkevich, New York: Palgrave Macmillan (forthcoming).
- Kwiek, M., and K. Szadkowski. (2018). 'Higher Education Systems and Institutions: Poland.' In *International Encyclopedia of Higher Education Systems*, edited by Pedro N. Texteira and J.C. Shin, 1–20. Cham: Springer.
- Mikołajczyk, B., and Naskręcki, R. (2017). 'Szkoły doktorskie i ich rola w kształceniu doktorantów'. *Nauka i Szkolnictwo Wyższe* 50: 107-126.
- NIK (2015). *Informacja o wynikach kontroli. Kształcenie na studiach doktoranckich*. Warsaw: NIK (Supreme Court of Audit).
- OECD (2010). *Careers of Doctoral Holders Indicators—2010*. Paris: OECD.
- OECD (2018). *Education at a Glance 2018: OECD Indicators*. Paris: OECD.
- OPI (2017). *OPI (National Information Processing Institute) database*. Accessed November 1, 2019. <https://polon.nauka.gov.pl/>.
- POLON (2019). 'The Integrated System of Information on Science and Higher Education.' Accessed November 1, 2019. <https://polon.nauka.gov.pl/en/index.html>.
- Siemieńska, R., and D. Walczak (2012). 'Polish Higher Education: From State Toward Market, from Elite to Mass Education.' *Advances in Education in Diverse Communities: Research, Policy, and Praxis*, vol. 7, 197–224.
- Szadkowski, K. (2014). 'The Long Shadow of Doctoral Candidate Status. Case Study—Poland'. *Social Work and Society* 12, no. 2: 1–17.
- Yudkevich, M., P.G. Altbach, and L.E. Rumbley (2015). *Young Faculty in the Twenty-First Century. International Perspectives*. Albany: SUNY Press.

Data Appendices:

Table 1. Doctoral students by mode of study and the number of doctorates awarded in Poland, 1990-2018.

| Year | Total | Full-time | Part-time | Doctorates awarded |
|------|--------|-----------|-----------|--------------------|
| 1990 | 2,695 | 1,926 | 769 | 2,324 |
| 1991 | 2,711 | 1,989 | 722 | 1,500 |
| 1992 | 2,900 | 2,054 | 846 | 1,800 |
| 1993 | 4,428 | 3,069 | 1,390 | 2,000 |
| 1994 | 7,133 | 4,697 | 2,436 | 2280 |
| 1995 | 10,482 | 6779 | 3,703 | 2,300 |
| 1996 | 13,351 | 8,355 | 4996 | 2,218 |
| 1997 | 16,419 | 10,819 | 5,601 | 2356 |
| 1998 | 19,735 | 14,538 | 5,197 | 3,172 |
| 1999 | 22,239 | 16,261 | 5,978 | 3,724 |
| 2000 | 25,622 | 18882 | 6740 | 4,400 |
| 2001 | 28,345 | 21,455 | 6,890 | 4400 |
| 2002 | 31,072 | 23,451 | 7,621 | 5,450 |
| 2003 | 32,054 | 23,626 | 8428 | 5,090 |
| 2004 | 33,040 | 23,027 | 8,949 | 5,722 |
| 2005 | 32,725 | 23,169 | 9,556 | 5,917 |
| 2006 | 31,831 | 21,567 | 9,378 | 6,072 |
| 2007 | 31,814 | 22,171 | 9,643 | 5,616 |
| 2008 | 32,494 | 22,531 | 9,963 | 5,370 |
| 2009 | 35,671 | 25,127 | 10,544 | 5,068 |
| 2010 | 37,492 | 27,066 | 10,426 | 4,815 |
| 2011 | 40,263 | 29,943 | 10,320 | 5,367 |
| 2012 | 42,295 | 32,998 | 9,297 | 5,576 |
| 2013 | 43,358 | 35,261 | 8,097 | 5,093 |
| 2014 | 43,399 | 36,458 | 6,941 | 5,712 |
| 2015 | 43,177 | 37,101 | 6,076 | 5,956 |
| 2016 | 43,181 | 37,548 | 5,633 | 5,999 |
| 2017 | 41,318 | 36,531 | 4,787 | 5,626 |
| 2018 | 39,269 | 35,110 | 4,159 | 5,945 |