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Executive Summary

In collaboration with the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) early in 2006, the Institute for Research Information and Quality Assurance (Institut für Forschungsinformation und Qualitätssicherung, iFQ) designed an evaluation of the Emmy Noether Programme, one of the most renowned programmes funding junior research group leaders in Germany. The evaluation study was designed to cover a broad variety of methods and traits as for example online surveys of all applicants, guided interviews with selected group leaders funded by the programme, bibliometric analyses of the publications by the applicants from four disciplines (medicine, physics, biology, and chemistry) and content analyses of reviews. Working from this collected data, we sought to depict the procedures, the applicants (both accepted and not accepted), the successes, and the pitfalls—and to some extent the causes—associated with prosperous careers. For this purpose, we compared in most cases the responses, statements, and attitudes of the funded group leaders with those of the unsuccessful applicants.

A considerable difference of the successful and not successful applicants was found in the professional career after funding decision. Although most of the unsuccessful applicants remain in the academic sector the former junior research group leaders have risen to the attractive, tenured positions at universities more quickly and more frequently. Some 48 per cent of the former research group leaders—as opposed to only ten per cent of the unsuccessful applicants—stated in the survey that they had meanwhile been appointed as tenured professors. It is therefore not surprising that the interviewed recipients of Emmy Noether funding reported significantly greater satisfaction with income, position, and prospects for professional development than did the unsuccessful applicants.

However, such pronounced differences between the two groups of applicants were the exception in our study. No differences existed between their responses on items inquiring about the current overall work situation or about the work content. The two survey groups also did not diverge much in the self-appraisal of their skills (particularly in their so-called “soft skills”). The similarity of the two groups is not confined to self-appraisal. The analysis of the applicants’ publications and their citations revealed no obvious differences—both before and after the application decision—between applicants who received funding and those who did not. Both groups published at a high level.

This result seems astonishing at first glance. After all, one expects the best to be selected and expects generous funding to lead to plainly superior performance. The reason for our remarkable finding emerges upon closer examination. The challenging standards for admission—apparent from the very name of the funding instrument, “*Exzellenzinitiative für den wissenschaftlichen Nachwuchs*” (Winnacker, DFG, 2006b, p. 2) (Excellence Initiative for Young Researchers)—led to a high degree of self-selection among potential applicants. But the task of selecting from good applicants those who will prove to be the best researchers is too much to ask of peer reviewers, and the Emmy Noether Programme is no exception in this regard. Indeed, foreign studies on programmes for junior researchers are yielding very similar results. Making a long-term forecast is thus only part of what the reviewing process is about. The specific research project, its planning and feasibility, and the institutional environment chosen for it are all major factors. There is also another reason that the unsuccessful applicants to the Emmy Noether Programme have also “done well.” Although the interviewed accepted applicants did not progress with their studies more quickly than their fellow students, but they earned higher grades, went about their entire professional development much more single-minded. In particular, the accepted applicants

managed all the transitions and their phases of qualification far more swiftly and smoothly than the total population of students and graduate students in Germany. This identified pattern of proactive attitude that we found among the interviewed Emmy Noether junior research group leaders had led these group leaders very early to closely considered agendas and plans for their academic career and ways of successfully implementing it. Acting with strong personal initiative and strength of purpose, they have sought, recognized, and optimally exploited given opportunities. Although we did not conduct guided interviews with unsuccessful applicants, the “tenacity” with which they have followed up on their envisioned projects (more than 70 percent of these applicants accomplish their project through other channels) indicates that accepted and rejected applicants do not differ much in proactive attitude.

There remains the question of whether a social filter is operant in the selection of the Emmy Noether junior research group leaders, as is not rarely the case with the recruitment of elites. Compared to the total population of students and graduate students in Germany, we found a relatively large share of the applicants to the Emmy Noether Programme from homes with strong educational backgrounds (about two thirds of the respondents came from families of academics.) Social origin, however, has not functioned as a distorting factor in the selection procedure. The share of persons from families of academics has even been slightly higher in the group of rejected applicants than in the group of those who received funding. Social selectivity takes place in earlier transitions of an academic career, not in the selection of the future group leaders.

Scholars who had the benefit of funding have achieved a crucial goal: a high degree of independence to conduct their own research. Group leaders perceived their research autonomy to be comparable to that of professors. Concerning resources, the recipients of funding were likewise in an advantageous position, even in comparison to assistant professors (“Juniorprofessoren”). A possible dark side contrasting the high degree of research autonomy enjoyed by the group leaders was their lack of integration into institutional procedure and decision-making. In the extreme case, it resulted in “institutional homelessness”. In the day-to-day work status this was reflected particularly by the restricted examination rights conceded to funded research group leaders (especially the right to award doctoral degrees). Unlike assistant professors (“Juniorprofessoren”) fewer than 40 percent of the group leaders were permitted to conduct doctoral examinations and could serve as the primary doctoral supervisor. Not rarely, this limitation led to dependence on professors and the desire to earn quickly an additional qualification (“Habilitation”) for a university chair. In other words, the funding by no means completely alleviates all concerns and uncertainties. The actual significance of an additional qualification (“Habilitation”) in appointment procedures for professorship can just be surmised by the respondents. A collateral guarantee by an additional qualification (“Habilitation”) appeared worth weighing to a majority of the respondents. Accordingly elevated is, with 50 per cent of the respondents, the share of research group leaders with either an additional qualification (“Habilitation”) or the intention for earning an additional qualification – although 76 per cent of all interviewees viewed that step as only a more or less meaningless ritual anymore. For that reason, many of them have chosen a cumulative procedure for their qualification (“kumulative Habilitation”) which they largely described as much less laborious.

Problems exist in the private sphere as well. Three quarters of the interviewees were in stable partnerships, some of them with children, and had to reconcile career and family. The solutions to the compatibility issue differed along distinctly gender-specific lines. Most of the female group leaders lived with partners who themselves held high academic degrees, had full-time jobs, and were occupationally very committed. By contrast, half of the female partners of the male group leaders were either not employed or had part-time positions. Perceptions of the situation differed, too. The men were apt to make concessions at the family’s expense, whereas the women wanted to accommodate both sides or (if no children were present) to plan on private “belt-tightening”.

The accepted and rejected applicants differed on these points just as little as they did on the characteristics of their occupational biographies, their generic disciplinary competencies, and

their publication records. This result thus leaves the serious question of the extent to which the Emmy Noether Programme is at least partly a “self-fulfilling prophecy”. An answer is difficult to offer. First, the very name “Emmy Noether Programme” definitely carries weight when it comes to procedures for appointments to university chairs. Second, the funding helps provide for experiences that go beyond the material realm; they change competencies, networks, and self confidence. The guidance and other support from the DFG’s head office have very significantly facilitated the passage that the recipients have made to the status of scientists working on their own. Every one of them rated the head office positively. While applying to the programme—as “novices”—the founded applicants still tended to shy away from drawing on the counseling and assistance offered by the DFG’s head office. But as they progressed through the funding period, they were impressed by the head office’s treatment of them as recognized academics, not as panhandlers, and by its remarkable responsiveness and high sensitivity to their problems. The interviewees felt themselves taken seriously and respected, not least because of the DFG’s receptiveness to their suggestions and wishes. The programme has not only become established as a “*Marke für herausragende Leistungen*” (Winnacker, DFG, 2006b, p. 3) (trademark of outstanding achievement) in the eyes of the wider community, it has become an integral part of the image that the funding recipients have of themselves.

The results are summarized in the working paper entitled “*Postdocs in Deutschland: Evaluation des Emmy Noether-Programms*” (Postdocs in Germany: Evaluation of the Emmy Noether-Programme). The report (available only in German) may be downloaded from

http://www.forschungsinform.de/Publikationen/Download/working_paper_3_2008.pdf