



Doctoral Training in the French-Speaking Countries of Europe: Objectives and Suggestions for Improvement

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Abstract: In this article we discuss a number of objectives we consider important for improving graduate training. In addition, we propose several methods by which each objective may be attained. The suggestions are geared toward Francophone universities in Europe (including France, Belgium, and Switzerland) and their particular constraints, but they may prove useful for colleagues in other countries as well. First, we discuss how doctoral students can receive top-quality training in order to acquire the knowledge specific to the demands of a future university pro-

fessor and researcher. Next, we develop more general objectives, including the development of a broad view of the discipline and the acquisition of skills such as the ability to write and publish scientific articles. We also emphasize the involvement of graduate students in professional activities and the necessity of developing close contacts with members of the broader scientific community. Finally, we discuss the selection of and the financial support for graduate students.

Keywords: Doctoral training, graduate school, dissertation, supervisor, PhD

Rapidly evolving sciences are characterized by changes in the standards of productivity, increasingly sophisticated technology, and growing internationalism. Such changes require continual revision and rethinking of the training of the next generation of scientists. Psychology is today just such a rapidly evolving science. And the members of its community cannot escape the pressure to engage in such rethinking. Investing our time and energy into the improvement of graduate training programs is invariably rewarded by the advancements and discoveries that can be made by the next generation.

In this article, we present several objectives for the training of future psychologists. We also offer suggestions and practical considerations for the realization of these objectives. The issues we raise are aimed at re-

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sponding directly to the demands and changes just mentioned. Comments from a number of sources, especially colleagues working in the so-called hard (natural) sciences, have been very useful to us. Our discussion is focused on the French-speaking countries of Europe (France, Belgium, and Switzerland). Although there are important differences among these countries, for example, in terms of the funding of graduate students and the extent of contact with the international community, there are sufficient similarities so that it makes sense to talk about the countries as a group. Furthermore, many of the suggestions may be useful to non-Francophone countries as well, such as those in eastern and southern Europe.

The article is organized around four major themes. The first concerns the graduate curriculum, that is, the institutionally agreed-upon body of knowledge that is imparted in the context of coursework and workshops. The second theme deals with the organization, depth, and breadth of the research activity that graduate students engage in during their training. The third theme concerns the professional activities of graduate students and their involvement in scientific and academic communities. The first three themes are related in that their common goal is the acquisition of an intellectual and scientific background that will support a successful academic career. The final theme concerns more the criteria for graduate student admissions and financial support. Naturally, we cannot offer our proposals as "ready-made" solutions because every university, every laboratory, and every research group has to cope with its own constraints. Rather, we consider the following discussion more as a repertoire of ideas from which departments or advisors can pick and choose.

Graduate Curriculum

The objectives of graduate training are to provide students with conditions under which they can conduct a doctoral dissertation that hopes to contribute to the current scientific literature, and to develop the methodological, pedagogical, and statistical skills required of a university professor and researcher. The conception of a worthwhile idea for the doctoral dissertation and the ability to locate it in existing international literature are both facilitated and, we would argue, dependent upon student participation in graduate courses and workshops. Fifty years ago the psychology literature was relatively tractable; students could master the literature on

their own, with relatively little guidance. But even that approach makes an important, and potentially erroneous, assumption about the best format for learning. Psychology literature has since exploded in such a way that it is very difficult to master even a small portion of it on one's own.

Graduate students cannot be expected to integrate, evaluate, or envision important future contributions to the current psychological literature without guidance. Furthermore, they are unlikely to learn to criticize or discern limitations of existing work without direct intellectual interaction with others, including both professors and other students. Thus, it is in the interest of professors to teach graduate seminars on theory and research methods as well as on hot new topics of interest. Such seminars enhance the scientific repertoire of graduate students working in their own laboratory and university as a whole. In addition, professors in countries in which graduate seminars are systematically taught report that their own research and intellectual development is enhanced invaluablely by such interaction with students in the context of graduate seminars.

Courses

Although it is not hard to argue in favor of the value, perhaps even necessity, of teaching graduate courses, most graduate students in France take the required courses during the first year of graduate training (called the *Diplôme d'études approfondies* (DEA, Diploma of Advanced Studies) and no courses at all in the three or more years that follow. The same is true in Switzerland. Although the course load is quite heavy in the first year, the total number of courses that French and Swiss graduate students complete during graduate training is therefore relatively small compared to North-American graduate students. The situation is slightly different in Belgium where Graduate Schools ("Ecoles Doctorales") offer courses for graduate students of all levels. Also, Belgian universities obtain financial support from the government based on the number of registered graduate students. Still, the total number of courses required of Belgium graduate students during their training is also small relative to the situation in North America. We do not propose that North America should be held as the standard for the optimal number of required graduate seminars and courses; what we do propose, however, is that there are good reasons for raising the course requirements of graduate students beyond the year of the DEA or equivalent. It remains to be seen whether the newly created Graduate Schools currently being set up

in France will allow students to distribute their coursework over several years.

Since doctoral courses are not generally required in the Francophone countries of Europe, and since the public university system is geared toward undergraduate students and is often reluctant to support small graduate seminars, how might the development of an expanded graduate curriculum be encouraged and instituted? First, on a national level, it is important for professional and scientific psychological organizations to exert pressure on decisionmakers to provide sufficient financial resources for graduate courses. The competent completion of a dissertation—and the conduct of a successful career as a university professor—requires knowledge and skills that are best, and sometimes only, acquired in advanced courses. Furthermore, such courses should not and cannot be redundant with courses for predoctoral students, because the content is not relevant to students with goals other than research and teaching at the university level. Typically, undergraduates learn simplified facts. Graduate students should learn to evaluate both the positive and negative features of research, and to synthesize larger bodies of often-inconsistent research findings (Brauer, 1999).

There are also ways of enhancing the graduate curriculum locally that can be implemented on relatively short notice. For example, even in the absence of a fully-expanded graduate curriculum, it might be possible to distribute graduate courses over several years instead of grouping them in the first year of the dissertation. Such a curriculum has already been adopted by some French universities (e.g., Université René Descartes—Paris V; see Streri, 2000), although it does not always receive institutional support and is not consensually agreed upon. This organization has not only the advantage of “obliging” the graduate students to maintain a certain regularity in their reading, synthesis, and intellectual interaction with other peers and professors, it also facilitates the development of the ability to divide one’s time between research and course activity.

If the number of courses cannot be increased for institutional reasons, several alternative curriculum-enhancing options exist. First, experts from other universities might be invited to conduct workshops that last from one day to several days. Such workshops might focus on specific topics (e.g., “counterfactual thinking” or “emotions research in social cognition”) and have as their goal the transmission of knowledge in a given area. In particular, they could focus on important discoveries, recent work on the topic by influential researchers, fruitful and appropriate experimental paradigms, and the

theoretical questions that need to be addressed in the years to come. Although financing such workshops may seem prohibitive at first glance, external funding for such initiatives does exist. For example, scientific societies such as the European Association of Experimental Social Psychology (EAESP) and the European Society for Cognitive Psychology (ESCOP) support such workshop initiatives, especially when graduate students from several universities in the same geographical area participate. A somewhat more modest solution is to ask visiting speakers, who are invited to present their work in a departmental or laboratory seminar series, to present an additional 2- to 3-hour workshop on the same day.

Graduate student meetings organized by scientific associations such as the Société Française de Psychologie (SFP) can also play an important role in meeting the goal of an enhanced and extended curriculum. More such meetings could be encouraged, perhaps with some on the international, some on the national, and some on the regional level (which probably involves seeking different financial sources other than the registration fees of the members of the scientific associations). Critically, it is possible to include in these meetings workshops on particular topics, such as “priming techniques” or “methods for assessing the allocation of attention,” that are relevant to a large proportion of graduate students.

Finally, greater effort could be expended to encourage Francophone students to participate in summer schools organized by national and international scientific organizations. For example, the European Association of Experimental Social Psychology (EAESP) organizes a 2-week summer school for 60 graduate students every 2 years. Only eight students from France, 12 students from Belgium, and three students from the French-speaking universities in Switzerland even sent their applications to the last EAESP summer school, which took place in July 2000 in Clermont-Ferrand. This is in sharp contrast to other European countries such as Germany (18 applicants) or the Netherlands (23 applicants). The International Society of Political Psychology (ISPP) has an annual summer school held at Ohio State University in the United States. Since 2002, the ISPP has organized parallel summer schools in Europe, the next of which is scheduled to be held in the summer of 2003 in Warsaw.

Tools

As noted above, the graduate curriculum of any single institution is subject to variation, and it is the responsibility of the curriculum committee of each department

or laboratory. For this reason, we do not make specific recommendations for the types of graduate courses that might be instituted. However, we would like to make an exception regarding one point: the teaching of tools used by research scientists. In the category of tools we include advanced statistical analytical techniques (including multiple regression, multidimensional scaling, structural equations modeling, the analyses of quasiexperimental designs, item-response theory), data analysis software used internationally (such as SPSS and SAS), software designed to run experiments on the computer (such as Superlab, Psyscope, MEL, and E-Prime), other frequently used software (such as Endnote or ProCite, Photoshop, and EXCEL), and also library databases (such as PsychINFO, ISI, DAI). The tools of data collection, also of importance, include the methodology involved in systematic observation, face-to-face interviews, and the construction of surveys.

Courses aimed at teaching the use of statistical, methodological, and experimental tools could and should be integrated into the graduate curriculum. Mastering the tools of science used in psychology is as necessary as mastering the tools of neuroscience or chemistry—and it should be valued to the same extent. If there is no way to institute statistics and methodology courses, or if the in-house faculty does not feel capable of teaching certain important topics, there are other forums for teaching such skills. For example, as already mentioned above, outside experts can be invited to teach methodological workshops. In addition, workshops could be introduced into conferences organized by national and international scientific associations. We believe that workshops with such titles as “The analysis of response latency data,” “Introduction to programming with Psyscope,” or “Recognition measures and the theory of signal detection theory” would be very well attended if they were offered during the annual meetings of a scientific association. These workshops would have two benefits: On the one hand, graduate students could attend them and learn new skills; on the other hand, faculty could retrain and refresh their knowledge, which would then allow them to teach these skills at their home universities in the future.

Language

At this point in the evolution of an international science, command of the English language is necessary for assuring the communication and impact of research findings. This is not to say that research in Anglophone countries is better or worse on average than research conducted in

non-Anglophone countries. We merely acknowledge the current reality. It is now undeniable that the ability to speak and write in English facilitates interactions at major international conferences (and more recently, even at smaller local conferences), the ability to publish in international journals, and therefore the probability of influencing the international dialog.

Proficiency in English could conceivably be an admissions criteria for graduate training programs (without necessarily being an eliminatory criterion), as is the case in the natural sciences. Another possibility is to include English in the course curriculum for graduate students. Such courses would be most effective if they focused not only on grammar, but also on scientific writing and oral communication. Although learning the language at some time is better than not learning it at all, there is, however, a drawback to using graduate school as a time to teach or substantially improve English skills: If students have not already mastered English, this affects the potential nature of other graduate courses and activities. For example, if English proficiency were required for admission, some graduate courses could be taught in English, or the requirements of some courses could involve presentations and writing at a high level of English competence.

Although the introduction of English classes into the training curriculum might be prohibitively expensive, psychology laboratories in the Francophone countries are seeing increases in the numbers of faculty members who are native speakers of English, or who speak English fluently. These individuals could teach some of their graduate courses in English. Finally, graduate students could be encouraged more strongly to do research internships and postdoctoral training in Anglophone countries or in laboratories in which the working language is English. It could also be emphasized, and demonstrated in local hiring decisions and practices, that such proficiency is a requirement for securing a position at a Francophone university.

Research

Successful completion of graduate school requires the realization of empirical research, that is, the practical application of knowledge acquired in seminars and interaction with other researchers. Research activity provides the empirical basis of the dissertation and fosters deeper learning of the concepts and skills learned in courses and seminars. However, it cannot be denied that the de-

mands made on researchers to integrate theories across areas in their subfield of interest—and even across subfields of psychology—are increasing. Increasing too is the array of research skills that the student must be able to put into practice. There are a number of ways in which graduate students can be encouraged to develop the perspective and research experience required to make advances in the field, and conduct a fruitful career in the context of this new research spirit.

Making a Contribution

If the dissertation is to constitute a contribution to the existing literature, the choice of topic and the combination of an important theoretical idea with effective research methods is necessary. In order to realize the dissertation, a well-trained student needs to have both a broad view of the subfield of psychology in which he or she is working (e.g., social psychology, cognitive psychology) and extensive specialized knowledge in the specific area of interest (e.g., group dynamics, perception). Probably everyone would agree on the latter assertion, that in order to avoid reinventing the wheel—and in order to be in a position to select valid experimental techniques—the student needs to specialize in one (sometimes two) specific areas of the subfield. However, the necessity to have broad view of one's subfield may be more controversial.

In our view, a broad knowledge base is beneficial in that it provides the researcher with the ability to observe significant patterns in the evolution of the subfield, and to correctly anticipate the specific research questions that are fruitful to pursue, both intellectually and practically. A broad overview also provides the student with the perspective required to see points in common across areas (e.g., in social psychology: attitudes and stereotyping, or emotion and self-concept) and to integrate these approaches into the dissertation. Finally, of course, a broad knowledge of the subfield is required if the student is later to teach courses successfully. An overview course (such as "Introduction to Neuroscience") requires a mastery of the subfield as a whole, not specialization in just one area.

Many funding initiatives in Francophone and non-Francophone countries now favor interdisciplinary research (across subfields and across fields). The interdisciplinary model is now evident even in the organization of psychology departments in North America. For example, the Psychology Department at Indiana University no longer has defined subfields in its organization or in its faculty and student recruitment. Thus, it seems

necessary to us that graduate students ultimately possess advanced knowledge in at least one other subfield of psychology. This could mean that graduate students in cognitive psychology working on context effects in recall should also study social psychology; that graduate students in developmental psychology working on the factors that disrupt the acquisition of concepts in children should also be familiar with research in clinical psychology; or even that graduate students in social psychology working on social control should have a good knowledge of sociology. The expansion of vision that comes with interdisciplinary study not only encourages graduate students to apply theoretical models or experimental paradigms from other subfields to their own areas, it also helps them to locate and promote more effectively their own contributions in the field of psychology as a whole.

One way to attain the objective of developing research knowledge of one's own subfield and one or two other subfields is to encourage graduate students to develop close collaborative relationships with professors other than their primary dissertation advisor. This type of initiative has been recently instituted to some degree in France in the form of the newly created Graduate Schools ("Ecoles Doctorales"). Such graduate schools are still in the experimental stage, but they have the potential for fostering interdisciplinary research. In fact, one of the underlying ideas of the Graduate Schools is that members of different faculties jointly supervise research projects. But the objective can also be encouraged, if not enforced, within the department or laboratory. For instance, graduate student might pursue two lines of research by working with two supervisors on completely different topics. One might imagine a cognitive psychology graduate students who spend 70% of their time working on children's development of number concepts with a primary advisor and 30% of their time working on the dynamic systems modeling of motor behavior development with a second advisor. The two research activities might even be located in two different subfields of psychology.

A somewhat less extreme option is one in which the student's research activity already comprises two related topics within the area. The relatedness may stem either from the fact that there is a partial overlap of theoretical models that are relevant to the two topics (e.g., attitudes and stereotyping, in social psychology), or from the fact that the first topic deals with applied aspects and the second topic with basic aspects of the same phenomenon (e.g., the acquisition of written language in children and lexical access, in cognitive psychology). In

either case, it would be helpful for the student to work with two advisors who are experts in the two specific areas of interest. Yet another solution is to work on a single topic with two (or even three) supervisors. One might imagine a developmental psychology graduate student working on age-related normal and pathological changes in adult memory. This student could carry on a research project with the help of three supervisors—one in cognitive psychology (for the fundamentals in memory), one in developmental psychology (for the developmental dimension of the research), and one in clinical psychology (for the background on Alzheimer's disease).

In most cases, the inclusion of an international member of the dissertation committee or as a secondary advisor could be beneficial because it facilitates contacts within the international network. This tendency already exists for many dissertation committees in the Francophone countries. However, in most cases the international member is contacted only several months or weeks before the defence. By involving such committee members from the very beginning of the dissertation research, the graduate students would profit from an outside view to a greater extent and would be able to create even closer international research contacts.

Learning to Write Scientific Articles

A successful researcher is obliged to write articles, integrate suggestions from reviewers, have discussions with editors, and progressively improve manuscripts, with the aim of publishing in well-known scientific journals. To this end, a student should be familiarized with the publication process early on in graduate training.

This would seem to be a modest goal, but it may be interfered with in part by the nature of the dissertation process in some Francophone countries. In France, for example, it is not rare to see 400-page dissertations. In most cases, these very long documents are associated with a relatively small number of published or submitted articles at the end of graduate training. In contrast, in Belgium, in the Netherlands, and in Canada, more and more dissertations take the form of a series of articles that are in press, under review, or ready to be sent out. Even a study that resulted in unpublishable data is presented in the form of a scientific manuscript. In most cases, this series of articles is accompanied by an introduction and a conclusion that place the research project in a theoretical context. Such a format is desirable because it focuses the attention of graduate students on the

publication process and encourages them to submit manuscripts from the outset of graduate training.

Indeed, dissertations are typically much shorter in the so-called hard sciences than in psychology. What is being evaluated by dissertation committees in these disciplines is the quality of the research that the graduate student has conducted during the previous 4 or 5 years. The student is awarded the doctorate because he or she has shown the ability to do research and to contribute to the advancement of science. The dissertation that documents this ability can be relatively short and, once again, should be presented in the same style that is used to disseminate research findings. If we accept shorter dissertations in psychology, graduate students would have more time to publish their research and thus to increase its impact. They would also have time to improve their *vitas*. Shorter dissertations also have another advantage: Such a format obliges graduate students to select, integrate, and analyze the literature. At present, students often try to discuss every study or theory that has ever been published on the topic, and their only personal input is in the way the presentation is structured and organized.

Professional Activities of Graduate Students

If the graduate curriculum and scientific productivity require rethinking, consideration of the future of the young researchers is equally important. To this end, involvement of graduate students in professional activities should be encouraged and facilitated to a greater extent than is presently the case. That is, during graduate training, students must develop the professional skills that they will need in their future career.

Becoming a Teacher

Given that most graduate students at least have the goal of becoming an assistant professor, it is clear that they should acquire teaching skills. Indeed, one of their major activities as university professors will be to transmit knowledge to students. Contrary to what some people might believe, being a good teacher is not simply a talent that one either possesses or not: Teaching is a skill that can be learned and improved upon.

Consequently, pedagogic training should, in our view, be an integral part of the graduate experience. This training can take place at the university or in specialized

centers (such as the “Centres d’Initiation à l’Enseignement Supérieur” [Centers of Introduction to University Teaching] in France). One could also imagine the institution of one or two seminars by well-known teachers. At certain universities, professors ask students in graduate courses to generate a course syllabus. For example, the students’ task is to hand in a detailed description of a one-semester course on “adult psychopathology” for undergraduate students in their third year. Such a description includes the structure of the lecture in the auditorium, the transparencies of the first session (possibly with Powerpoint), the reading assignments, the activities to be done in the laboratory courses (exercises, illustrations, movies, discussion topics, activities to be done in small groups), as well as the final exam and its grading scheme. Through feedback from professors graduate students learn to set up a course on a particular topic.

Furthermore, and perhaps most critically, in this context is efficiency and time management. In most European and North-American universities, the “teacher-researcher” model is the norm. Although France offers a research career in the National Center for Scientific Research (CNRS), the number of teacher-researchers far exceeds the number of CNRS researchers. Thus, the ability to juggle the time demands of both research and teaching is probably the most troubling aspect of an academic career in any country (not to speak of the heavy administrative responsibilities). Some countries have more resources for providing aid to professors than others. For example, in North-American departments, teaching assistants funded by the graduate institution aid significantly in the writing and grading of exams and the teaching of discussion sections. In many Francophone countries that is nearly unheard of. Thus, in these countries, discussion of time management, the balancing of research, teaching, and administrative duties is perhaps even more critical for a successful academic career. Teachers in these countries have often eschewed solutions such as the use of multiple-choice exams, because, they argue, such tests are not as effective as open-ended exams in testing acquired knowledge. This is, of course, an empirical question. It would be prudent to examine the existing literature on the predictive validity of multiple-choice exams before they are dismissed as unuseful. In addition, the use of methods or statistics classes for the generation and testing of the professor’s own research ideas, the construction of courses around topics that must be mastered by the professor, the use of already-existing materials for teaching (including ones that can be downloaded from the internet), and the sharing of teaching materials should be encouraged.

A final solution for the training of teaching skills, and one already in place in some departments, is the requirement that graduate students present their research in the departmental- or area-wide seminars. Although the presentation of a specific research project in front of a small number of colleagues is not the same thing as lecturing several hundred students about a broad area or even a subfield of psychology, the two activities possess sufficient similarity. With detailed feedback from the supervisor students can improve teaching skills (e.g., speed of talking, development of ideas, use of transparencies or Powerpoint) by making such presentations.

Being in Contact with the Scientific Community

Increasingly, graduate students need to be integrated into national and international scientific networks from the beginning of their doctoral training. It is important for them to establish contacts with researchers from other universities and to be connected to the international scene via scientific associations.

How can we attain this objective? Nothing is more enriching than an internship in another laboratory, preferably abroad. Although in theory the notion of an internship or postdoctoral training is not new, it is still true that the proportion of graduate students who remain in France and Switzerland (to a much lesser extent in Belgium) without conducting research abroad is greater than in other European countries. The Swiss National Science Foundation offers one-year stays abroad for special training. It seems obvious that a graduate student who has worked in a different laboratory will be a more flexible assistant professor, will adapt better to new research questions, will learn more strategies for time management and curriculum development, and will have a broader view of the discipline. The European PhD “Social Representations and Communication” is a good example of an initiative that fosters early integration of graduate students into the international community (de Rosa & Moscovici, 1998). The initiative promotes close collaborations between professors and graduate students from seven different European countries, a dissertation committee that is necessarily international, and a yearly meeting among graduate students. This is a good example of a way to open the minds of graduate students (see Roland-Lévy, this issue, for a more detailed description).

Also important in this regard is membership in European scientific associations such as EAESP, ESCOP, and the European Society for Developmental Psycholo-

gy (ESDP). These contacts not only promote a certain open-mindedness, they also provide graduate students with a clearer image of the scientific culture, the current preoccupations of the discipline, and acquaintanceships with future colleagues. The fact that only a small number of graduate students are members of these associations is surprising given that student membership fees are generally very low and the benefits are fairly impressive. For example, membership in the EAESP includes a subscription to the *European Journal of Social Psychology* and, for a modest supplement, to the *European Review of Social Psychology*. Members of the Society for Personality and Social Psychology (SPSP) receive the *Personality and Social Psychology Bulletin* and the *Personality and Social Psychology Review*. Members of ESCOP receive the *European Journal of Cognitive Psychology*. And members of ESDP receive *Developmental Science*. In all cases, membership also includes free subscriptions to information bulletins (*European Bulletin of Social Psychology*, *Dialogue*, *ESCOP Newsletter*) that contain information about conferences, scientific reunions, travel grants, meetings among graduate students, new books, or simply information about the scientific community.

The Admission of and the Financial Support for Graduate Students

Clearly, revision of graduate training along the lines suggested here implies an increase in the workload of already very busy students and professors. However, the revised goals could be more easily attainable if students entered graduate training programs more fully prepared to deal with current reality.

Admissions Criteria

In most French universities, simple approval by the future supervisor is currently necessary and sufficient for admission to graduate school. Such an admissions process fosters a graduate training environment in which students with suboptimal backgrounds and basic skills are carried (or pushed) through the graduate program by their advisors. This is not only a potentially demoralizing, or frightening, experience for the students; it also leads to many unsuccessful outcomes. A good knowledge of important theories, a solid grounding in methodology and data analysis, a certain familiarity with computers, and a command of the English language have become undeniable prerequisites for graduate ad-

mission. Graduate school cannot, and by no means should not, be an institute for remedial education. Its purpose is high-level fine-tuning of already existing knowledge, and the training of new experimental and critical skills. Graduate students have the time and resources to fill small gaps but under no circumstances will they have the time to fill major gaps or to start learning a new skill (e.g., learning English or rudimentary statistics).

A clearly articulated selection process is, in our view, a necessity. In French universities, such a selection is considered normal for professional graduate training such as the DESS (Diplômes d'Études Supérieures Spécialisées, diplomas of advanced professional studies), but is not considered egalitarian enough and thus not necessary for doctoral programs. There are certainly other selection criteria that—when associated with the approval of the future dissertation supervisor—allow us to make more precise predictions concerning the scientific productivity of a graduate student, such as a letter of recommendation from the supervisor of the undergraduate honor's thesis (the "Mémoire de Maîtrise" in France), a letter of motivation by the candidate, an entrance exam, the undergraduate grade point average, an interview with a selection committee, or the student's score on the TOEFL (Test of English as a Foreign Language). This procedure does not necessarily imply that only students with a classic profile will be admitted; on the contrary, students with an atypical background can sometimes contribute to the discipline, and it would be a mistake to exclude them systematically.

Financial Support

One reason why graduate student selection criteria are not often the topic of discussion is that the ratio of applicants to graduate school positions in Francophone countries is actually quite small. The smartest and most motivated undergraduate students generally do not want to pursue an academic career. Although there are probably many factors responsible for this lack of interest, one major reason is that the career of graduate students in psychology is just not very attractive. Research assistantships are unheard of, and there is usually no more than one teaching assistantship (called "allocation") available for five or six graduate students. As a result, the vast majority of French graduate students have to finance their studies themselves through small jobs outside the university. In order to get a job as an assistant professor, French graduate students have to have had

“extensive experience in teaching.” To get this experience, they are obliged to accept a position as “chargé de cours,” a contractual teaching job that involves teaching two courses per semester and is paid approximately 300 Euros per month. Thus, most graduate students in psychology have a relatively heavy teaching load, are obliged to work for 20 to 30 hours outside the university (unless they are financially supported by their parents), and must also deal with the pressures of their supervisor, who may be disappointed that they are not able to conduct more research. It is not surprising that so few undergraduates are interested in continuing on to graduate school in psychology.

The situation is slightly better in Switzerland. Here, approximately half of the graduate students are financed through teaching assistantships. The teaching load is moderate, and the salary allows graduate students to lead a normal life without being obliged to work outside the university. Graduate students in Belgium are in a considerably more favorable situation: Numerous institutions provide graduate students with funding throughout their graduate training. These include the Fonds National de la Recherche Scientifique (equivalent to the French CNRS or the American NSF), regional ministries of science, the universities themselves, and—believe it or not—the National Lottery. In Belgium, monthly salaries are quite satisfactory, and only a very small percentage of graduate students attending a Belgium university are not financed.

Three possible solutions can be proposed for the less-advantaged countries, none of which is easy to implement. The first is to exert more pressure on decision-makers, to insist on the necessity to increase the number of government-funded teaching assistantships, and to include money for the financial support of graduate students in the research grants given to individual researchers. The second solution is to convince university councils to give more contractual positions to students rather than to individuals who are not students. The university has numerous technical, administrative, and computer-related positions that could be given to graduate students on a contractual basis. An obstacle to changing the mind of decisionmakers and university councils is that they themselves often suffered the same difficult conditions that we suggest should be changed. They therefore assume that it is possible, or perhaps even desirable, that subsequent generations endure these conditions as well. We are not so sure. It is only responsible, in the current environment, to provide students with the resources to live up to international standards of productivity and contribution.

A third and final solution is to convince commercial companies to finance more psychology graduate students. The French and the Belgium university system allows for industry-financed research assistantships in which a private enterprise finances a graduate student for 3 or 4 years and in exchange the graduate student spends part of his/her time doing research on a topic the enterprise is interested in (under the supervision of an advisor). Although most of us probably did not choose a university career in order to work for, say, the advertisement industry, some marketing department, enterprises that develop school textbooks, companies producing foreign-language videos, or even the personnel office of a major enterprise, we might want to consider whether such an applied setting is not the ideal opportunity to test some of our theories—and if it is only to prevent our graduate students from working as waiters or cashiers.

Conclusions

The goal of this article is to contribute to the improvement of graduate training of psychology graduate students in the Francophone countries in Europe. We know that most of our suggestions have already been implemented at some universities in France, Belgium, or Switzerland, but they are by no means systematically implemented or even accepted. Far from it! We obviously cannot provide definitive answers. Rather, our objective was to launch a debate on this issue and to compare and contrast our ideas with different suggestions mentioned in the other articles of this issue. We are sure that our discipline can only profit from the open and uncritical exchange of ideas that is taking place in this special issue of the *European Psychologist*.

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