

“Prevention science and disability studies”: A postgraduate doctoral study overview

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Introduction

A number of psychological, social and economical aspects are known to be risk factors for children, young people and their families, as well as for public institutions, resulting in increasing incidences of child neglect and abuse, juvenile pregnancies, youth and peer violence, crimes by children and youth as well as crimes against children, substance addiction and abuse, homeless children, poverty, insufficient child care and other issues (Marmot and Wilkinson 2006). Many risk factors are leading to family instability, which in turn becomes an emotional risk for children's development. Thus, there is a growing perception (both among the public and professionals) that the problems of children and young people are becoming more severe and that children are starting to show problematic behaviors at a younger age. These problems require urgent prevention interventions. There are several action programs in Croatia for those who are at risk of developing behavioral disorders or manifesting different forms of risk behavior. To name a few, the National Program of Action for Children in the Republic of Croatia (adopted in 1998), Priority Activities for the Welfare of Children 2003–2005 (2003), the National Strategy for Combating Narcotic Drugs Abuse (1996), and the Action Plan on Drugs issued in 2004 and every year since then by the Government of the Republic of Croatia—the Office for Combating Narcotic Drug Abuse—the National Family Policy (2003), the National Youth Action Plan from 2003.–2008. (2003) (Council for children 2003, Ministry of the Family, Veterans' Affairs and Intergenerational Solidarity

2010). Currently, the National Strategy for the Prevention of Behavioral Disorders is being prepared.

Therefore, our society is obliged to educate highly professional and scientifically minded workers at PhD levels to design and investigate the most efficient ways of representing the rights of children and young people. In particular, there is a need for scientific problem elaboration, epidemiological indicators, longitudinal follow-up, scientifically based strategies for mental health promotion, and mental and behavioral disorder prevention in children, young people and adults. Scientists educated in such a way would advocate the rights and needs of children and young people at the national, county and municipal government level, often in specialized departments that would establish national or local strategies (not segregated through several divisions) of prevention action/practice and constantly evaluate its effects (Bašić 2009).

Reasons for founding the prevention science studies—mental and behavioral disorders prevention and mental health promotion—and the basic postulate of the studies

This doctoral study (Prevention Science module—Mental and Behavioral Disorders Prevention and Mental Health Promotion) is based on the modern interdisciplinary scientific understanding of health promotion, prevention of mental and behavioral disorders, crime, addiction, violence and other risk behaviors in children and young people. It will result in qualified scientists who will research, develop and implement specific strategies of promotion and prevention. The program will provide training in:

- monitoring and describing problems and needs of children and young people at risk of developing various

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forms of behavioral disorders (epidemiological and etiological studies),

- describing and monitoring occurrences and problems in multiannual research (longitudinal studies),
- evaluating and constantly modernizing existing forms of prevention interventions (evaluation studies and cost-effectiveness studies not present in our scientific practice),
- elaborating and implementing overall strategies for health promotion; quality of life for children, young people and adults; risk behavior prevention (overall strategies for universal, selective and indicated prevention).

The mission of this program is training the scientists who, based on scientific grounds, would be capable of creating professional/public policy for children and young people on both national and local levels in administrative bodies within all departments, ranging from health care, education, social welfare, justice and police to specific scientific research. The study program has been designed for training scientists to take a leading role in improving and integrating prevention science knowledge into theoretical research and professional practice (University of Zagreb, Faculty of Education and rehabilitation sciences 2009).

Collaborating institutions in the development and implementation of the doctoral studies

A procedure for obtaining a PhD degree in science has been in place at the University of Zagreb, the Faculty of Education and Rehabilitation Sciences (earlier Faculty of Behavioral Disorders Defectology) since December 1973. The doctoral program—Prevention science and disability studies—is the successor of the previous program offered at the Faculty of Education and Rehabilitation Sciences with significant differences introduced by the Bologna Declaration: international mobility of students and professors, work load comparability of the students, and comparability of the quality of studies and recognition of teaching programs in other European countries (Council of Europe 2000). Prof. Josipa Bašić, PhD, head of the doctoral studies program as well as head of the module “Prevention Science” has previous experience in postgraduate studies management at the University of Zagreb, Faculty of Education and Rehabilitation Sciences (1990/91; 1991/92 and 1992/93; 1995/96 and 1996/97; 2003/04 and 2004/05, 2005/06), supervising master and doctoral theses, as well as experience in managing and conducting a number of scientific research projects in Croatia and abroad.

Doctoral program research at respected foreign universities comparable to the basic idea of this module has

shown that, without a doubt, similar programs exist, but not to the extent proposed for these studies.

At the time of preparing these studies, programs in the relevant area that could be adapted completely to the Bologna Declaration had not yet been developed in Europe. On the other hand, doctoral programs found in Europe are so broadly defined that it was not possible to find identical and entirely comparable studies. For the purpose of the module Prevention Science, the most similar program was a PhD Study at the Behavioral Science Institute, Faculty of Social Science, Radboud University Nijmegen, The Netherlands (especially regarding the module Mental Health and Addiction). This was the basis for collaboration with this university and in particular with Prof. Clemens Hosman, PhD (one of the most significant professors in this study), head of the Prevention Research Centre for Mental Health Promotion and Mental Disorder Prevention at the Radboud University Nijmegen, The Netherlands.

A number of doctoral study programs partially covering the topic of this module exist in the USA. The decision to join the scientists at Pennsylvania State University (The College of Health and Human Development, Human Development and Family Studies) was made for several reasons: annual meetings of professors and scientists at world congresses, collaborative scientific research and similar courses in their PhD program. Collaboration is about to start between the Prevention Research Center founded at the University of Zagreb (Faculty of Education and Rehabilitation Sciences) and the Prevention Research Center at Penn State University.

This doctoral program is certainly the first of its kind in modern postgraduate programs in Croatia and a rare one in the European and global context (assessed by the foreign associates who contributed to establishing these studies). Its great advantages are an interdisciplinary approach as well as a larger number of professors (40) and researchers from several scientific fields from Croatia and abroad. The interdisciplinary approach mentioned is also apparent in the proposal of a new interdisciplinary science (e.g., prevention science and/or behavioral science, etc.). However, this requires constant discussions, adjustments, expert guidance and interpersonal help in relation to student guidance as well as professor/scientific team management.

Students coming from various disciplines will create their own curricula, and one could say a new scientific discipline (especially for the field of prevention science, which is recognized on the world scale in journals, among others the Journal of Primary Prevention and Prevention Sciences, and through scientific research and practical work of prevention centers and associations, e.g., the Society for Prevention Research, USA; the Social Development Research Group, USA) will start to develop from the doctoral level.

For the postgraduate study as a whole, *Prevention science and disability studies* was founded based on the assessment that we need to move away from the previous methods of creating doctoral studies within one scientific field, and towards an interdisciplinary approach and meaningful bridging of several scientific disciplines. It is known that explaining certain human phenomena is not possible today without the cooperation of several sciences or their branches. Keeping this in mind, these doctoral studies will integrate and build (possible) new sciences within education/rehabilitation, medical (mental health, epidemiology, etc.), psychological, pedagogical, social, economical, political and other sciences.

Collaboration, the next innovation of these doctoral studies, involves working together on teaching, scientific and research work of domestic and foreign lecturers and scientists in various scientific areas. For this purpose, the preparation and signing of contracts with the above-mentioned foreign universities and centers are in progress. Collaboration will be carried out in both segments of classes as well as in segments of scientific research projects involving doctoral students. Scientific projects that will be commissioned directly by the ministries and other public institutions have been considered during the doctoral program presentation at relevant ministries and other government bodies (Bašić 2006). On these occasions, certain ministries have expressed interest in such collaboration (e.g., the Ministry of Justice and the Ministry of the Interior, Health and Social Welfare Administration Department of Istria County).

Various forms of partnerships with the public and private sector in conducting scientific research already exist, and discussions have been held on the ways in which these partnerships could be developed or continued after implementing this doctoral program (e.g., support of the Health and Social Welfare Administrative Department of Istria County, City of Šibenik Municipality, Croatian Employment Service; please see attachments). This still needs to be worked on.

A certain innovation not directly related to the doctoral program itself, but helping its implementation, is the negotiations on the possibilities for financing good quality candidates in this program by some ministries, which confirms the justification and assessment of the validity of the program and expectations of the results for the state and its strategic actions. Some NGOs have also expressed their interest in these studies. The stated actions and contacts have already been made for the first generation of students coming from the government and other institutions or non-governmental organizations.

For the purpose of establishing the mobility defined by the Bologna process, an effort will be made to enroll foreign students in the next academic year (2010/11). As

the University of Zagreb Faculty of Education and Rehabilitation Sciences already has a tradition of collaboration in undergraduate and postgraduate courses with the University of Tuzla, and recently the University of Zenica (both in Bosnia and Herzegovina), there is a possibility that they will also participate in these doctoral studies as well as in the enrollment of students from the University of Ljubljana, Slovenia. Students from other European countries will also be able to enroll in these doctoral studies because most courses are held in English, and, if needed, this could be extended to all courses. It is possible to enroll in individual courses/semesters as well, stimulating direct student mobility. The same will be possible for courses with already assigned teachers or new teachers, allowing the participation of guest lecturers who have not yet been included in the program. Unofficial information from our colleagues who teach abroad and collaborate in scientific and research activities indicates the possibility of European students attending certain courses that have not been offered in this way through the existing doctoral program in Europe.

Doctoral studies structure and organization

The University of Zagreb Faculty of Education and Rehabilitation Sciences is responsible for these doctoral studies, offering this course in cooperation with a number of institutions (please see the domestic and foreign institutions participating in the implementation of the doctoral study program module Prevention Science below):

1. University of Zagreb, public institutes:
 - Medical school, School of Public Health Andrija Štampar
 - Law School
 - Faculty of Humanities and Social Sciences, Pedagogical Department
 - Faculty of Economics and Business
 - Faculty of Political Science
 - Institute for Social Research, Zagreb
 - Croatian Institute of Public Health, Zagreb
2. University of Rijeka
 - Medical School
3. Universities and centers in Europe and the USA:
 - Radboud University Nijmegen, The Netherlands, Department of Clinical Psychology, and the Academic Center of Social Sciences, The Netherlands
 - Prevention Research Center for Mental Health Promotion and Mental Disorder Prevention, Radboud University Nijmegen, The Netherlands

- University of Maastricht, Faculty of Health Sciences, Department of Health Education and Promotion, The Netherlands
- Pennsylvania State University, College of Health and Human Development, Department of Human Development and Family Studies, SAD
- Prevention Research Center for the Promotion of Human Development, Pennsylvania State University, SAD
- Pedagoška Fakulteta, Univerza v Ljubljani, Slovenija, Ljubljana

The prevention science program is organized into two course modules: the module prevention science (PZ) branch and the module on methodological and statistical courses (MSZP) including practical work under guidance.

The schematic layout of the study illustrates student obligations in teaching, scientific research and other extracurricular activities. Collection of points from *lecture obligations* (i.e., point group A) has been defined by the mandatory and elective courses. It is also possible to choose elective courses from other postgraduate doctoral courses at the University of Zagreb and other universities in Croatia and abroad, which means that lecture ECTS points earned by students studying within and outside of Croatia will be recognized. This segment of elective courses will be determined individually (for every student) through the development of the personal curriculum (education goals and doctoral studies' student needs), as agreed by the Postgraduate Council (small council) upon advisor (mentor) and student proposals. A minimum of 50% of the elective courses must be chosen among the proposed study courses. The total number of points from lecture activities is 60 throughout the entire 3 years of study (Table 1).

Scientific research activities related to the point collecting areas are defined by two groups of points: as a group of research work either independently or under guidance

(point group B) and as extracurricular/program activities (point group C). Students can obtain points from group B from mandatory and elective activities, with active involvement in scientific research work, by writing and publishing scientific articles in domestic and foreign journals (CC or equivalent), writing and publishing book reviews, journal annals, making presentations at scientific conferences, round table discussions, etc., and active participation at domestic and international scientific conferences with oral and/or poster presentations (with a certificate from the organizer of the conference). Within point group C, the students are expected to: participate at various scientific meetings, summer or winter schools, workshops, lectures, etc., throughout the course of the study. All activities within this segment are required to be properly documented by the student. Points will be awarded according to a specially designed table that will define points for every individual activity (Tables 2 and 3).

Student guidance, starting with the creation of a personalized curriculum to involve all forms of scientific and research activities, is responsible for the quality of the study and of the scientific and research work (existing scientific projects involving students or using their results) as well as for extracurricular activities. Therefore, every student has been given an opportunity to be guided by two different advisors. One is a *teaching mentor*, whose role consists of advising the student when designing a personalized curriculum. The second one is a *research mentor*, whose role consists of advising the student throughout the process of research work and in drafting and writing the doctoral thesis. Good quality development of students requires certain responsibilities from both mentors. In order to ensure quality, each student's progress will be monitored. The frequency and methods of monitoring, and by whom and how it will be done, will be defined separately. The goal of the monitoring system is to ensure good study quality and that 100% of the enrolled candidates complete their studies. In order to achieve this, and considering the increased responsibilities of mentors, their individual work loads must be balanced so that one teaching/research mentor does not have more than two candidates.

Doctoral studies end with the doctoral thesis defense. A student may defend a thesis if all ECTS points have been collected, all mandatory exams successfully completed, and at least one paper published in CC or equivalent journals. The entire procedure from applying for the thesis to defending it has the following check points: applying for the subject and doctoral thesis mentor proposal, forming a three-member committee for subject evaluation and public thesis defense, public defense, making the decision for accepting the subject and continuation of the doctoral thesis, application of completed thesis for defense, and evaluation of the thesis and defense of the thesis. For this

Table 1 Study structure for the course Prevention science—mental and behavioral disorders prevention and mental health promotion

First year	25 ECTS	Lectures
	20 ECTS	Practical work under guidance
	15 ECTS	Extracurricular activities
Second year	21 ECTS	Lectures
	20-30 ECTS	Independent research under guidance
	09-19 ECTS	Extracurricular activities
Third year	14 ECTS	Lectures
	10-20 ECTS	Independent research under guidance
	30-40 ECTS	Independent research
	01-05 ECTS	Class involvement
	05-20 ECTS	Extracurricular activities

Organized lectures; research activities; other extracurricular activities

Table 2 A list of courses according to years, time burden and ECTS points, module: Prevention science—mental and behavioral disorders prevention and mental health promotion

Year	Code	Courses	Hours	ECTS
First year	PZ1	Behavioral disorders prevention and health promotion: introductory course	20	3
	PZ2	Epidemiology of mental and behavioral disorders	20	3
	PZ3	Analyzing mental health problems for prevention planning	25	4
	PZ4	Developmental psychopathology and prevention	25	4
	PZ5	Program development and program planning	20	3
	MSZP1	Scientific research methods	25	4
	MSZP2	Search of relevant scientific information sources	6	1
	ZP1	Public policies	12	2
	PZ13	Social exclusion (of youth) in postmodern times	20	3
Second year	PZ6	Theories and principles of change and effect management	25	4
	PZ7	Dissemination and implementation of prevention programs	20	3
	PZ8	Community needs assessment and monitoring	20	3
	PZ9	Evidence-based prevention programs and outcomes	25	4
	PZ10	Law and behavioral disorders prevention in children	12	2
	MSZP3	Multivariate data analysis	25	4
	PZ11	Interventions and prevention beyond institutions	12	2
	PZ14	Preventive strategies in family and school environment	20	3
Third year	ZP2	Ethics in scientific research	12	2
	MSZP4	Methodology of qualitative research in social pedagogy	20	3
	PZ12	Mental health promotion: from principles to practice, from practice to policy	20	3
	ZP3	Public relations, media and public campaigns	12	2
	MSZP5	Cost benefit studies	12	2
	ZP4	Creating a project	12	2
	MSZP6	Approach to data organization and analysis for the purpose of doctoral thesis	6	1
	MSZP7	Preparing article for scientific journal	6	1

purpose, a manual for writing a doctoral thesis will be created that will include, in addition to formal instructions, details on basic ethical principles in setting up and conducting a research project. Rules regarding the application, deadlines, evaluation and defense of the doctoral thesis will be regulated separately (Ordinance on Doctoral Studies).

Maximum duration of the (organized) study period from start to completion for *full time students*, planned for ECTS collection, is 3 years. The fourth year is planned for work on the thesis, completing the thesis and defending it. ECTS points were not planned for this additional fourth year. Exceptionally, it is possible for the studies to last for 5 years. This study rhythm will be endorsed by the good quality of the study organization, good quality of the chosen candidates, support and work by the teaching and research mentors, and stimulation of such work by both candidates and mentors. The same principles are valid for *part-time students* for the first 3 years of the study and ECTS collection, but the total duration until the end of the study (for applying and defending the doctoral thesis) is 5/6 or exceptionally 7 years.

Other characteristics of the doctoral study organization and implementation

Managing the doctoral study is performed on several levels:

- *The Coordination Committee* is comprised of the Vice-Dean for Science, a study leader, leaders of the courses and representatives of the institutions involved in the doctoral study program implementation.
The Coordination Committee appoints a *study leadership* that is comprised of the leader of the study, leaders of the courses and selected representatives of the institutions involved in the program implementation.
- *The Postgraduate Study Council* is responsible for the working and implementation of the plan and study program, particularly research and other activities. The Postgraduate Study Council consists of all teachers involved in program implementation.
- *The Small Postgraduate Council* is separately appointed and is to be used either for making important and quick decisions or for long-term advice on studies, especially

Table 3 List of mandatory and elective courses through 3 study years

Status	Code	Courses
Mandatory	PZ1	Behavioral disorders prevention and health promotion: introductory course
	PZ2	Epidemiology of mental and behavioral disorders
	PZ3	Analyzing mental health problems for prevention planning
	PZ4	Developmental psychopathology and prevention
	PZ5	Program development and program planning
	MSZP1	Scientific research methods
	PZ6	Theories and principles of change and effect management
	PZ7	Dissemination and implementation of prevention programs
	PZ8	Community needs assessment and monitoring
	PZ9	Evidence-based prevention programs and outcomes
	PZ10	Law and behavioral disorders prevention in children
	MSZP3	Multivariate analysis of the data
	ZP2	Ethics in scientific research work
	MSZP4	Methodology of qualitative research in social pedagogy
	PZ12	Mental health promotion: from principles to practice, from practice to politics
	ZP3	Public relations, media and public campaigns
	MSZP5	Cost benefit studies
Electives	MSZP2	Search of relevant scientific information sources
	ZP1	Public policies
	PZ13	Social exclusion (of youth) in post-modern times
	PZ11	Interventions and prevention beyond institutions
	PZ14	Preventive strategies in family and school environment
	ZP4	Creating research projects
Electives from other faculties	MSZP6	Approach to data organization and analysis for the purpose of doctoral thesis
	MSZP7	Preparing articles for scientific journals

regarding foreign participants and their experiences. It is comprised of a study leader, leaders of the courses and one foreign associate from each course.

- More details about the roles of the aforementioned bodies have been given in the ordinance on Organization and Implementation of Doctoral Studies.

Based on the evaluation of good-quality implementation of the proposed postgraduate doctoral study in all aspects, especially regarding quality assessment and keeping in mind the length of study and the possibilities of finishing studies for every individual student, the optimum number of students for the module Prevention Science is eight, and the maximum is ten students.

Monitoring and improving doctoral program quality will be conducted on several levels:

- The level of doctoral program implementation (student and teacher evaluation).
- The level of doctoral program goals (learning outcomes)—acquiring knowledge and skills, mastering techniques and methods of scientific work, relevance

of the skills required for employment in academic and non-academic institutions, etc.

- The level of institutional evaluation mechanisms for doctoral program quality improvement (self-evaluation procedures, evaluation procedures, student questionnaires, analysis of success in conducting the program and indicators of success).

Process evaluation of students and feedback from teachers have been very positive so far.

Conclusion

Highly educated professionals and scientifically oriented researchers are urgently needed in Croatia. The first professionals with the new PhD title from the doctoral studies “Prevention Science and Disability Studies” will receive their degrees in the 2012/2013 academic year. It is believed that these new kinds of professionals will contribute to the development of better and more adequate policies for the prevention and care of people with intellectual disabilities

(Bašić 2006; Bašić and Igrić 2006). These experts will contribute to the development of science in the field of mental health and behavioral disorders prevention, as well as in the field of advocacy for the rights of people with special needs. It is expected that the doctoral program will be highly evaluated and that a new generation will be enrolled during the school year 2012/2013.

Conflict of interest I declare that I have no proprietary, financial, professional or other personal interest of any nature or kind of service or product that could be construed as influencing the position presented in this manuscript except of the following: I am the manager of the doctoral program "Prevention science and disability studies."

References

- Bašić J (2006) Razvoj i evaluacija u zajednici utemeljene prevencije i rehabilitacije. In: Doktorski studiji (ed) Pero Lučin, Rijeka. Nacionalna zaklada za znanost, visoko školstvo i tehnološki razvoj Republike Hrvatske, pp 137-148
- Bašić J (2009) Teorije prevencije: prevencija poremećaja u ponašanju i rizičnih ponašanja djece i mladih. Školska knjiga, Zagreb
- Bašić J, Igrić L (2006) Projekt poslijediplomskog doktorskog studija: Razvoj i evaluacija u zajednici utemeljene prevencije i rehabilitacije. Prevenzijska znanost i studij invaliditeta. Sveučilište u Zagrebu Edukacijsko-rehabilitacijski fakultet, Zagreb, pp 1-237
- Council of Europe, The Bologna declaration on the European space for higher education: an explanation (2000) Available at: <http://ec.europa.eu/education/policies/educ/bologna/bologna.pdf>
- Council for children (2003) Priority activities for children's welfare in the Republic of Croatia for the period 2003-2005. Vijeće za djecu, Zagreb
- Marmot M, Wilkinson R (2006) Social determinants of health. Oxford University Press Inc, New York
- Ministry of the Family, Veterans' Affairs and Intergenerational solidarity (2010) Strategije, konvencije i programi iz područja Uprave za obitelj. Available at: <http://www.mobms.hr/zakoni/strategije-konvencije-i-programi-iz-podrucja-uprave-za-obljelj.aspx>
- Nacionalna obiteljska politika. National Family Policy, Puljiz and Bouillet (2003) Republic of Croatia, Državni zavod za zaštitu obitelji, materinstva i mladeži, Zagreb
- Nacionalni program djelovanja za mlade od 2003.-2008. godine. National Youth Action Plan from 2003.-2008. (2003) Republic of Croatia, Državni zavod za zaštitu obitelji, materinstva i mladeži, Zagreb
- University of Zagreb, Faculty of Education and rehabilitation sciences (2009) The program of the "Prevention science and disability studies" Postgraduate doctoral study. Zagreb