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Preface

Aiming at greater mobility of work and organizational (W&O) psychologists and raising the quality of their professional services in Europe, the European Association of Work and Organizational Psychology (EAWOP) has created a Task Force to define minimum standards that European psychologists should meet in order to qualify for independent practice in the field of W&O psychology. The Task Force was asked to generate specific proposals regarding the European Certificate in Psychology (EuroPsy), which represents the first level of professional development, and the Advanced European Certificate in W&O Psychology, which represents the second level. The Task Force oriented itself at existing norms, such as the ENOP Reference Model and Minimum Standards for W&O Psychology and EuroPsy. In collaboration with ENOP the Reference Model was updated and expanded. Moreover, building on EuroPsy, a detailed description of Competences for W&O psychologists was developed. On the basis of this, a Competence Survey among European W&O psychologists was conducted. New trends and innovative practices have also been explored. Using these and other sources of information the Task Force drafted a set of proposals that are laid down in this report. As requested by EAWOP, the proposals aim to improve the application of EuroPsy in the W&O psychology field and to complement EuroPsy with an Advanced European Certificate in W&O Psychology that can serve as a means to develop the profession and to guarantee expertise and competence vis-à-vis clients and employers.

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1. Introduction

In 2005 the European Federation of Psychologists Associations (EFPA) adopted the EuroPsy system to advance the qualifications of European psychologists. EuroPsy defines a set of requirements regarding the academic education, professional competence, and ethical commitment of psychologists that should be met by individual psychologists in order to demonstrate that they can be expected to render adequate services to their customers and employers. The system is currently being implemented in a number of countries, with the aim of a full scale launch at the European level in 2009. EuroPsy is based on an assessment of the educational and competence portfolio of psychologists. Those who meet the requirements are awarded a "European Certificate in Psychology" and are entered in a public web-based register as a "Registered European Psychologist" for a certain period of time. This qualification can be extended for an additional period provided that certain requirements concerning continued professional development and relevant work experience are met. EuroPsy makes a distinction between 'contexts of practice', that is, holders of the European Certificate are considered to be qualified for work in a bounded domain only. To be registered as qualified for that domain, they must have conducted supervised work in the domain and have presented evidence of sufficient competence. W&O psychology is one of the contexts of practice.

EuroPsy clearly represents a great step forward compared to the past when psychologists in Europe had widely diverging qualifications. Yet, it also has some limitations. First, it only deals with the basic level of qualification needed for entry into the psychological profession. Second, it fails to set clear standards regarding the academic preparation of psychologists entering into supervised practice in a particular domain. This has been a reason for the European Association of Work and Organizational psychology (EAWOP) to establish a Task Force with the mission to develop proposals that can help to overcome these limitations. The proposals of the Task Force, which has been active between late 2005 and late 2007, are laid down in this report. They aim at specifying additional, academic requirements for obtaining the European Certificate in Psychology with W&O Psychology as recognized context of practice, and at establishing an Advanced Certificate in

W&O Psychology that can be obtained after a psychologist has obtained the European Certificate in Psychology and gained further competences in this context.

Like EuroPsy, the qualification system proposed here poses requirements to the academic education of psychologists as well as to the competences acquired during on-the-job learning, in professional practice. Thus, it combines an *input model* (evaluation of inputs during academic studies) with an *output model* (evaluation of competences, as output of professional practice). Both models are applied to the basic and the advanced level, but with different standards. Clearly, psychologists seeking a qualification at the advanced level (obtaining the European Certificate in W&O Psychology) should meet higher standards than those seeking a qualification at the basic level (obtaining the European Certificate in Psychology, with W&O psychology as the context of practice).

The main focus of this report is on setting requirements, assessing candidates and awarding certificates. Yet, the report also addresses the issue of development, considering ways in which psychologists can be trained and coached to obtain the needed expertise and competences. Moreover some practical suggestions are given concerning structures, roles, procedures and forms that will be needed to implement the proposed system.

This report is written for a broad group of stakeholders and policy makers. The primary audience consists, of course, of the Executive Committee, the Constituents and members of EAWOP. But the report is also written with ENOP, Universities, and EFPA in mind. What is proposed is a design of a future qualification system that needs to be further elaborated before it can be implemented. It is hoped that responses from various sides will help to shape the proposed system further, facilitate its coordination with EuroPsy, and promote its ultimate adoption. It is envisaged that for the purpose of implementation a more formal and operational document will have to be written.

The structure of the report is as follows. We will begin with stating the aim and rationale of developing European Certificates, and describing the logic of the proposal. Next, we will describe input and output requirements for the two levels (basic and advanced). After presenting some ideas about developing and assessing expertise and competence, we will deal with the process of awarding certificates and describe practical issues such as organizational structures, roles, procedures and tools. The report is complemented with a set of appendices, dedicated to definitions (Appendix 1), the ENOP-EAWOP Model,

competences and competence profiling, a summary of survey results, supervision and coaching, documenting work experience, and Continuing Professional Development.

2. Aim, rationale and structure of the proposal

W&O psychology is the oldest area of applied psychology. Since the early studies conducted at the end of the 19th and the beginning of the 20th century an impressive body of knowledge has accumulated. However, at present work and organizational psychology can no longer be considered to be just a field of applied psychology. It is a distinct psychological discipline with its own theories and methods that -- like other psychological disciplines -- relies to some degree on knowledge from adjacent fields. While this discipline is constantly advancing, as basic research improves our understanding of behavioral phenomena, applied research brings innovations in methods and techniques that keep expanding the scope of professional assessment and intervention. It is essential that psychologists working in the field of work and organizations (W&O) are adequately informed about the major theories and methods of the discipline, and that they are able to apply the major methods and techniques in the proper way and also to innovate and develop new methods and techniques to contribute to better solutions for the customers and clients. Their expertise and competence are not crucial to develop the discipline further, but they are also required to serve the interests of the clients to which W&O psychologists offer their service. The general aim in this report, therefore, is to formulate standards that guarantee a certain level of expertise and competence in psychologists working in the field of work and organization.

The standards are meant to apply to all European psychologists working in the field of W&O psychology. A compelling reason for this is that psychologists increasingly work in cross-national settings. Growing mobility of clients as well as psychologists, make it necessary to create tools for safeguarding client interests at a European rather than a national level. A distinction is made between two sets of standards aiming at two levels of professional practice. The first level is that of beginning psychologists -- graduates who intend to start working as a psychologist and who choose to do so in the field of work and organizations. The second level is that of experienced psychologists who want to further develop their expertise and competence and work as a specialist in this field. These two levels are referred to as *basic* and *advanced*. As was mentioned in the introduction, psychologists in the first category will have to

meet the general requirements of the European Certificate in Psychology (EuroPsy), but also the additional requirements for the basic level that are spelled out in this report. For psychologists in the second category there will be the possibility to obtain the Advanced European Certificate in W&O Psychology, provided that they meet the requirements for the advanced level that are also spelled out below.

Our proposal is based on the general idea that psychologists in the W&O context can only be considered qualified if they are informed about the theories and methods of the discipline, and are able to apply them competently in practice. This idea, which accords with the science-practitioner model and the notion of evidence-based practice, is operationalized in two complementary ways:

- (1) a set of *requirements concerning the academic education* that psychologists should have received *before entering into practice*;
- (2) a set of *requirements concerning competences* that should be acquired *through professional practice* conducted under supervision or coaching and of which evidence should be provided when applying for a certificate.

These two approaches, which – like in EuroPsy – are referred to as input and output model, will be applied at the two levels mentioned above:

- (1) the basic level of EuroPsy, where psychologists after completing their academic study enter into supervised practice in W&O psychology in order to obtain the designation of this context on their Certificate;
- (2) the advanced level, where psychologists are following a specialized curriculum in W&O psychology and subsequently do practice in the field of W&O psychology while being coached by an experienced colleague.

In the following paragraphs we will first consider the input model with its dual application to the basic and advanced level. Next we will discuss the output model, again applying it to the basic and advanced levels.

3. Input Requirements: The ENOP-EAWOP Model

Academic studies provide students with knowledge, skills, attitudes and basic competences, which can be considered as inputs for developing expertise in W&O psychology. To provide the proper inputs the academic curriculum must have a certain scope and duration. Guidance on this point is provided by the Reference Curriculum Model and Minimum Standards developed by ENOP-EAWOP in 2007, which is included in Appendix 2. While the system entails a single framework to define the structure of an academic curriculum in W&O psychology, it provides two sets of standards, i.e. for the basic level (the curriculum that must be followed by psychologists who prepare for EuroPsy and intend to enter into supervised practice in the field of W&O psychology) and the advanced level (the curriculum that must be followed by those who intend to qualify for the Advanced European Certificate in W&O Psychology). For an explanation of the framework and the standards we refer to the Appendix 2. Here we reproduce the tables (Table 1 and 2) with the requirements.

Table 1. Minimum standards for EuroPsy - W&O Psychology (Basic Level) Required credits in ECTS (European Credit Transfer and Accumulation System)

| min. 6 | min. 6 | min. 6 | |
|--------|--------------------|--------------|---------|
| Work | Personnel | Organization | |
| | Orientation course | | min.2 |
| C & | min. 12 | | |
| (| min. 12 | | |
| St | recommended | | |
| Total | | | min. 28 |

Table 2. Minimum standards for the Advanced Certificate in W&O Psychology (Advanced Level) - Required credits in ECTS (European Credit Transfer and Accumulation System)

| min. 12 | min. 12 | min. 12 | |
|--------------------------|-----------|--------------|----------|
| Work | Personnel | Organization | |
| Cou & te | min. 18 | | |
| Cou | min. 24 | | |
| Stage & research project | | | min. 30 |
| Total W O P | | | min. 90 |
| Other subjects | | | |
| Total | | | min. 120 |

4. Output Requirements: Competences and their Assessment

In order to practice in the field of W&O psychology –at the basic level or the advanced level – the psychologist must have acquired certain competences beyond what was learned during the academic study. It is, for instance, not enough to know the major theories of motivation and organizational change, or to be able to conduct job analyses or to administer tests. To successfully recognize and address clients' problems the psychologist must develop a broad range of competences. The notion of competence used here is defined as the "capacity to adequately perform a task, duty or role in the context of a professional work setting". Thus, a competence is understood to integrate knowledge, skills, personal values and attitudes, and to be acquired through work experience and learning by doing (Bartram & Roe, 2005; 2007). Psychologists' competences relate to the services they render to clients with the aim to promote the development, well-being and performance of individuals, groups, organizations and society. Competence implies the use of scientific principles, knowledge, models and methods, and their application in an ethical and scientifically sound way. The importance of ethics should be underlined here. The psychologist should not only know the rules of

professional ethics but be able to effectively apply them in practice. Competences are context specific. This explains why they differ across contexts of practice and why they cannot be generalized without further learning.

Psychologists who intend to practice in the W&O field should be competent in analyzing clients' goals, making the appropriate kinds of assessments, developing required instruments, planning and carrying out appropriate interventions, evaluating effects, giving adequate feedback to clients, and so on – all in the context of work and organizations. This calls for a practice-based learning process, involving real clients, that requires the psychologist to make assessments and take appropriate actions, and that offers an opportunity for reflection. This learning should be guided and supported by a coach or supervisor, who can evaluate the appropriateness of the learner's activities and give feedback.

The competences that psychologists in the field of W&O psychology should develop and possess can be described by the same general categories used by EuroPsy. There are twenty competences, divided into six functional groups, i.e.:

- Goal specification: Needs analysis; Goal setting
- Assessment: Individual; Group; Organizational; Situational
- Development: Product or service definition and requirements analysis; Design;
 Testing; Evaluation.
- Intervention: Planning; Direct person-oriented; Direct situation-oriented; Indirect;
 Product or service implementation.
- Evaluation: Planning; Measurement; Analysis.
- Communication: Giving feedback; Report writing.

As they pertain to the context and the role of a W&O psychologist, these competences can and should be described in more specific terms than is the case in EuroPsy. They can be differentiated according to the three main areas of the discipline, i.e. work, personnel and organization, which are also used in the ENOP-EAWOP model. Next to the primary or professional competences, mentioned above, which reflect the content of the W&O psychology profession, psychologists should also develop and posses some secondary or enabling competences. These are competences that all academic professionals should have. They comprise:

- Continuous professional development,
- Professional relations,
- Research and development,
- Marketing and sales,
- Account management,
- Practice management,
- Quality assurance.

All competences are described in Appendix 3

The competences and their descriptions reflect the current state of practice in W&O psychology. Changes in organizations, the nature of work, or the content of the profession may require an adaptation of the list of competences. This may imply that the same generic competence categories are retained while the descriptions are updated. It is also possible that certain competences will have to de dropped and/or others added to accommodate changes in the long run.

To establish the relevance and applicability of the list of competences, the Task Force conducted a survey among European W&O psychologists. A report on the survey is presented in Appendix 4. The main conclusion from the survey is that all types of professional and enabling competences are currently seen as relevant and important for the work of W&O psychologists. Some differences in relevance of competences between job types and regions are observed, and some indications can be found that required competences are subject to change over time. These findings require closer analysis because they point at areas where the professional development is needed.

4.1 Preparation and Assessment in Academic Studies

Psychologists in the W&O field are expected to lay the basis for their expertise by means of academic study in psychology with some degree of differentiation / specialization in W&O psychology. The ENOP-EAWOP model indicates which content should be covered and how extensively. It is an important objective for curriculum designers to make sure that the desired content is actually covered to a sufficient degree. Students of psychology should also

be aware of the required content, to be able to make informed choices from the options offered in the curriculum or between curricula offered by different faculties or universities.

The assessment of the academic preparation will take place in two ways. The first way is the evaluation of *curricula published by universities* to establish whether they meet the criteria set in the ENOP-EAWOP model. This curriculum evaluation, which is to be executed by experts, shall facilitate the evaluation of individual applications and provide feedback to universities in case of significant shortcomings. Secondly, the *personalized curriculum* as absolved by an individual psychologist will be subject to evaluation by an awarding committee to see whether it meets the requirements.

4.2 Preparation and Assessment of Competences

A common way to keep track of the process by which professional competences are learned is a *Portfolio*. This is a collection of documents that provides evidences about professional activities undertaken in terms of "what was done, for whom, when, how, what was produced, how it was evaluated" etc. An additional tool that can greatly enhance the value of the portfolio is a *Competence Development Record*. This is essentially a table that lists professional activities that have been performed over time and that have resulted in the development of particular competences (see Table 3). These two tools can be used in any practice-oriented learning process, either as a means to monitor and guide the learning process, or retrospectively to document activities that have taken place.

The development of competences by W&O psychologists will profit from a proactive approach in which the psychologist and the supervisor or coach plan ahead which competences will be developed next, and which activities will have to be developed for that. This implies an important role for the supervisor and coach. The role of the supervisor has been defined in EuroPsy. He/she is a fully qualified psychologist who carries professional responsibility for the work done by the psychologist in training, and who provides guidance. The role of the coach is confined to the phase of preparing for the Advanced Certificate in W&O Psychology. The coach supports the psychologist's professional development but does so in a horizontal relationship. See Appendix 5.

Table 3. Model of Competence Development Record with examples

| Competence | What | For whom | When | How | Result |
|-----------------------|---|---------------------|-----------|---|---|
| Goal setting | Doing intakes with new clients | Own firm | 2001-2002 | Interviews with managers and follow-ups | Description of aims in project plans |
| | Intakes with employees in career planning | Phillips Ltd. | 2004 | Individual sessions | Aims for development plans |
| Individual assessment | Testing applicants | AABER Consulting | 2002-2003 | Administration of test battery | Selection advice for 78 candidates |
| | Conducting employee interviews | CB bank | 2006-2007 | Design of interview, 2 hour sessions, writing protocols and giving ratings | Recommendations on improvement in working conditions and employee development |
| Product design | Knowledge test development | AABER Consulting | 2002-2003 | Exploring technical knowledge domain, generating questions, field testing, item analysis, making scoring rules and norms | Technical Knowledge Test (on-line, 30 items, for technical sales people) |
| | Employee attitude questionnaire | CB bank | 2007 | Generating questions for 4 domains based on exploratory interviews; data gathering, scale analysis | Annual Satisfaction Survey (40 items, 5-point Likert) |

Pro-actively developing competences, with the help of coach, can take the form of fulfilling assignments or performing certain work tasks. A tool to support such an approach is a *Competence Development Scheme*, which specifies the competences to be acquired and indicates practice/learning periods and deadlines (see Figure 1). This tool can be used as a plan for the learning process and as a progress chart for keeping track of the learning outcomes achieved.

Although it is an important challenge for educators in the field of W&O psychology to guide and promote competence learning, the emphasis in the context of the EuroPsy and the Advanced Certificate in W&O Psychology is on competence assessment. Making valid assessments about a psychologist's competences will be difficult unless the assessor – typically a supervisor or a coach – disposes of specific information about the learning trajectory and the outcomes obtained in a range of professional situations that the psychologist was confronted with. Therefore we recommend that competence assessment takes place during the supervision or coaching period and that it is supported by the use of the aforementioned tools, that is, a Competence Development Scheme, a Competence Development Record, and a Portfolio.

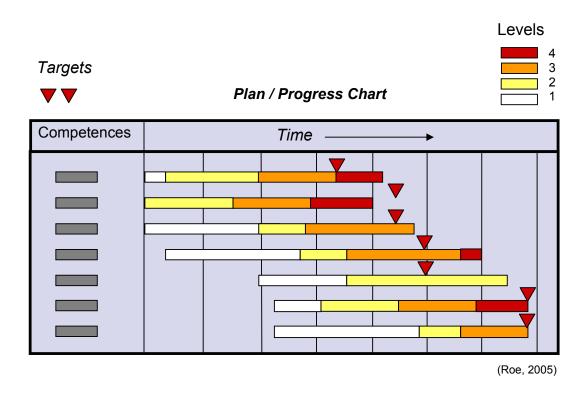


Figure 1. Model of Competence Development Scheme

In the implementation of the Advanced Certificate in W&O Psychology assessments will have to be made on the basis of documentation that is offered after the psychologist has completed an extended period of work and competence development, accompanied by a process of professional coaching. We recommend that for this purpose the applicant should prepare a structured CV that describes relevant practice learning experiences for each requisite competence (or group of competences). Such a structured CV should be backed up

by a Portfolio that contains documentation about the roles performed and the results obtained. Suggestions regarding the structured CV are given in Appendix 6.

EuroPsy requires that candidates should have demonstrated competence in each of the six major professional functions (Goal specification, Assessment, Development, Intervention, Evaluation, and Communication) as well as in the category of enabling competences, for at least one broad context of practice. The requirements for the Advanced Certificate in W&O Psychology are different. Here, the requirements pertain to at least one subfield within W&O psychology (that is, Work psychology, Personnel psychology, or Organizational psychology). Moreover, candidates should possess at least 15 out of 20 specific professional competences, with at least 2 in each function, and 6 out of 8 enabling competences.

Competence assessment should not be limited to the evaluation of written documentation, but complemented with an oral examination in which the applicant explains and documents the learning experiences, a *Competence Assessment Interview*. Such an oral examination represents a good practice in many fields where the competences of professionals are to be assessed.

Competences assessments can be expressed in different formats. We recommend to adopt the rating scale used by the EuroPsy. This is a 4-point scale that indicates the degree to which the applicant can be expected to carry out the activities in which competences is required (see Table 4). The scale can be used to make pass or fail evaluations, depending on

Table 4. Competence Rating Scale

| 1 | 2 | 3 | 4 |
|--------------------|---------------------|------------------|--------------------|
| Basic knowledge | Competence for | Competence for | Competence for |
| and skill present, | performing basic | performing basic | performing complex |
| but competence | tasks but requiring | tasks without | tasks without |
| insufficiently | guidance and | guidance or | guidance or |
| developed | supervision | supervision | supervision |

the required level of a competence. For the Basic EDP, competences are evaluated in groups and an overall level of level 3 should be attained (3 = competent to do simple tasks independently). For the A/EDP, it is recommended that a more specific approach be used, whereby at least two competences in each category should be present at level 4 (4 = competent to do complex tasks independently).

5. Structure, process and procedures

We refer to the EuroPsy documentation for a description of the way in which the European Certificate in psychology is issued. Our recommendation to EFPA is that the standards described above are adopted and used in the process of admitting psychologists to supervised practice in the field of W&O psychology, and in awarding Certificates with W&O psychology as the designated context of practice.

As for the Advanced Certificate in W&O Psychology, we propose that the authority to award the Certificate rests with a European Awarding Committee (EAC), to be established as an organ of EAWOP. Furthermore, we propose that National Awarding Committees (NACs) are created to process applications and award Certificates on behalf of the EAC. These committees should be composed of senior professionals in W&O psychology and directors of academic programs in W&O psychology at the Master and/or Postgraduate level. The NACs might be appointed by the EAC upon the proposal of the relevant EAWOP Constituents. The NACs are responsible for elaborating national standards that are in agreement with the common European standards on education and competence. That is, they should identify which current systems of academic education and which (former) curricula are (and are not) in agreement with the ENOP-EAWOP Model, and the Competence Requirements. These standards should be updated periodically. The National Awarding Committees can handle applications themselves or - in case of large numbers - appoint Application Committees to do so, using the standards that they have set. Any issues on which the NAC's cannot decide will be presented to the EAC for resolution. The EAC is the highest body responsible for the Advanced Certificate. Monitoring changes in the W&O discipline and profession and updating the ENOP-EAWOP model and the Competence Requirements is a part of this responsibility.

The process of obtaining the Advanced Certificate consists of the following steps:

- 1. The candidate submits an application (paper or electronic with uploaded documents) to the National Awarding Committee (NAC)., which comprises:
 - an application form,
 - a copy of the university diploma with a list of courses and grades,
 - a copy of the European Certificate in Psychology / EuroPsy (in the context of W&O psychology)
 - evidence of additional post-graduate education,
 - a structured CV,
 - a Portfolio,
 - evidence of work while being coached as W&O psychologist,
 - a Competence Development Record (recommended).
- 2. The NAC confirms the receipt of the application and asks for supplementary information in case this is not complete or up to date. Next, a threefold evaluation of the application is carried out.
 - a. The university degree and the lists of courses/grades are evaluated against current academic qualification standards for the country, which has been validated against the ENOP-EAWOP model. The question is: Does the applicant have an academic education of the proper type and length?
 - b. If the applicant was educated at an earlier time, when a different educational system was in operation, an evaluation of the degree and list of courses/grades is done against a list of curricula that was previously validated against the ENOP-EAWOP model or directly against this model. Again the question is: Does the applicant have an academic education of the proper type and length?
 - c. The NAC invites the applicant for a Competence Assessment Interview, performs a reference check regarding the coaching, and evaluates the applicant's work experience and competences against the competence requirements and the quantitative requirements regarding the work experience.

- 3. The NAC integrates the results of the evaluations. In case of a deficiency, the applicant is informed about the need for compensation. The Advanced Certificate is either awarded or not awarded. In the latter case the applicant can appeal and ask for a review of the NAC's judgment.
- 4. When the Advanced Certificate is awarded, the applicant receives a certificate and his/her personal details are registered in the Register of European W&O Psychologists, a public register that is accessible through the Internet.

A summary chart of the process is shown in Figure 2.

As a *transitional arrangement*, psychologists with extensive work experience may apply for the Advanced Certificate in W&O Psychology under a grand-parenting scheme. This scheme entails the following:

- the applicant should be a holder of the ECP / EuroPsy (with W&O context)
- s/he should provide evidence of competence gained during a period of at least five years of independent practice as a W&O psychologist, within the last 10 years;
- the evidence is to be assessed by means of a Competence Assessment Interview.

The Advanced Certificate in W&O Psychology will be valid for a limited period of time. After this period the validity can be extended provide that the psychologist has continued to work in the area of W&O psychology, and has maintained his / her professional and enabling competences. The proposal is to set the period of initial validity, as well as that of the extensions, at 5 years. A proposal regarding the requirements for extension, consistent with those of EuroPsy, is given in Appendix 7.

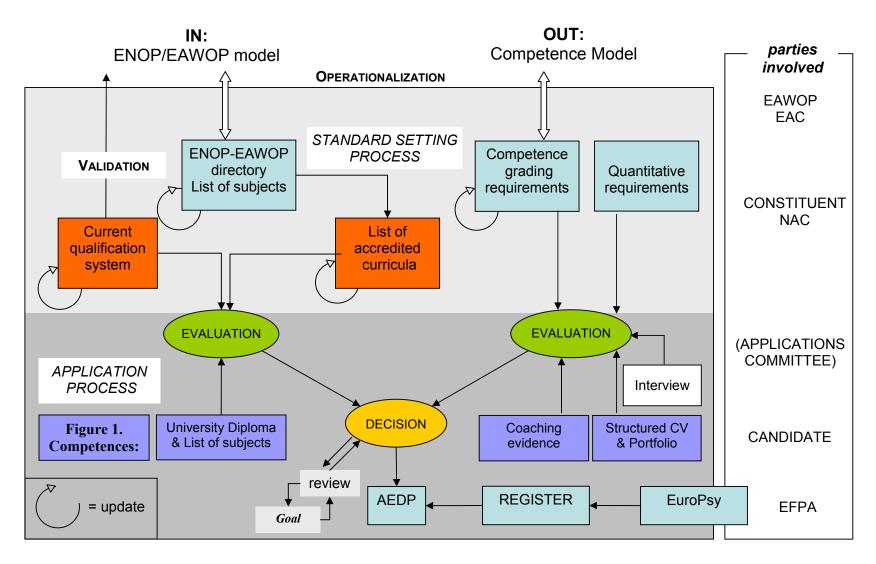


Figure 2. Application process overview

References

- Bartram, D. (1996). Occupational standards and competence-based qualifications for professional applied psychologists in the U.K. *European Psychologist*, *1*, 157-165.
- Bartram, D. & Roe, R. A. (2005). Definition and Assessment of Competences in the Context of the European Diploma in Psychology. *European Psychologist*, 10, 93-102.
- Bartram, D. & Roe, R. A. (2008). Individual and organizational factors in competence acquisition. In W. J. Nijhuis, R. J. Simons & A. F. Nieuwenhuis (Eds.), *The learning potential of the work place*. Rotterdam: Sense Publishers.
- Lunt, I. (1998). Psychology in Europe: challenges and opportunities. *European Psychologist*, 3, 93-101.
- Lunt, I. (2002). A Common Framework for the training of psychologists in Europe. *European Psychologist*, 7, 180-191
- Peiró, J.M and Lunt, I. (2002). The context for a European Framework for Psychologists' Training. *European Psychologist*, 7, 169-179.
- Roe, R. A. (2002). What makes a competent psychologist? *European Psychologist*, 7, 192-202.
- Roe, R.A., Coetsier, P., Levy Léboyer, Cl., Peiró, J.M., Wilpert, B. (1994). The teaching of Work and Organizational Psychology in Europe. Towards the development of a Reference Model. *The European Work & Organizational Psychologist*, 4 (4), 355-365.

Appendices

Appendix 1. Glossary

Advanced European Certificate in W&O Psychology

the document to be issued (cf. diploma) to Registered European W&O Psychologists in the system proposed by EAWOP.

Coach

a W&O psychologist with at least the equivalent of 5 years (fulltime) experience as an independent professional in the field of W&O psychology in the last 10 years, and who has been recognized as qualified for coaching other W&O psychologists on the basis of a successful fulfillment of this role during a period of at least 2 years.

Country of residence

the country where the psychologist or EuroPsychologist is registered as resident.

Country of practice

a country where the psychologist is practicing or intends to practice

Dependent practice

fulfillment of professional roles vis-à-vis clients under the responsibility and authority of another psychologist who is qualified for independent practice in the particular professional context.

EuroPsy

the system that regulates professional qualifications of psychologists at the basic level (entry into professional practice) adopted by EFPA in 2005.

European Certificate in Psychology

the document to be issued (cf. diploma) to Registered European Psychologists in the EuroPsy system.

European Register of Psychologists

register with individual records of EuroPsychologists, part of Europsy.

EuroPsychologist

refers to the holder of the European Diploma EuroPsy as mentioned in above.

Independent practice

fulfillment of professional roles vis-à-vis clients without direct supervision by other psychologists.

National Association of Psychologists

in a country, is the association or federation of associations that holds membership in the European Federation of Psychologists' Associations (EFPA).

Professional competence

the capacity to adequately fulfill a professional role as defined in Appendix 3.

Professional context

a particular category of work settings in which psychological services are rendered visà-vis a particular category of client. W&O psychology is one of the main contexts of professional practice (also: context of practice).

Professional roles

refers to the six categories of professional activities making up the psychological services delivered within a professional context, as mentioned in Appendix 3, i.e. goal specification, assessment, development, intervention, evaluation and communication.

Psychologist

a person who has successfully completed an academic curriculum in psychology at a university or an equivalent institution and fulfilled other conditions that by law or custom lead to a national title or qualification of "psychologist", provided the curriculum has a duration equivalent to at least five years (300 ECTS) of full-time study, and meet the specifications spelled out by EuroPsy.

Registered European W&O-psychologist ®

a psychologist who has successfully fulfilled the requirements for the Advanced Certificate in W&O Psychology and has been inscribed in the European Register of W&O Psychologists.

Scientific knowledge

refers to the knowledge accumulated in the scientific literature of the discipline of psychology and shared in the community of researchers and teachers of psychology.

Supervised practice

the fulfillment of professional roles vis-à-vis clients by a psychologist practitioner-intraining with the direct supervision by a qualified psychologist, either as part of the university curriculum or outside of a university.

Supervisor

a qualified psychologist who has been trained and accredited to supervise psychologists during their initial professional development.

Appendix 2. ENOP-EAWOP Model

European Curriculum Reference Model with Minimum Standards for W&O Psychology: Basic and Advanced

ENOP. European Network of Organizational and Work Psychologists EAWOP. European Association of Work and Organizational Psychology

PREFACE

During the 1990s European Network of Organizational and Work Psychologists (ENOP) developed the European Curriculum in W&O Psychology Reference Model and Minimal Standards with the purpose of harmonising and defining the minimum core of education for W&O psychologists in Europe. Recent changes in higher education and in professional mobility in Europe require an update of the model and a joint effort from ENOP and the European Association of Work and Organizational Psychology (EAWOP) has undertaken this task. The purpose of this revised version of the Model is to provide the minimum educational requirements for the basic and advanced education for the practice of Work and Organizational Psychology.

Background

ENOP is a network of university professors in work and organizational psychology established in 1980. The network has organized a wide range of scientific and educational activities, including comparative research programmes, conferences and workshops, student and teacher exchange programmes, summer schools etc.¹.

During the 1990's ENOP has developed a model of the curriculum for the training of work and organizational psychologists in Europe. Initially these efforts concentrated on the clarification of the state of affairs concerning the training in the various countries of Europe and at the development of a common frame of reference model that aimed to facilitate the comparison of curricula and the design of more harmonized curricula. The first so-called 'Reference Model' was discussed in ENOP at its Symposium on February 25-27, 1993, and in a special session at the 6th European Congress of Work & Organizational Psychology (Alicante, April 14-17, 1993). Comments were also solicited from associations and interest groups in the various countries of Europe, as well as from readers of 'The European Work and Organizational Psychologist'². A revised model, established at the ENOP Symposium of March 10-12, 1994, served as a basis for a survey of the actual situation with regard to the teaching of W&O psychology in Europe. This survey, conducted in the fall of 1994 revealed which parts of the model were (and were not) present in the curricula of the various European universities, and allowed to identify the common core of W&O psychology as well as the variations across the curricula of the different universities.

The model was published by the Maison des Sciences de l'Homme and distributed across Europe. It has proved to be useful in helping to design new curricula at European universities, to organize joint programs and to review research carried out in different countries.

At the end of the 90's the Bologna Declaration (1999) introduced important changes in higher education in Europe aiming to create a Common Space for Higher Education in Europe by 2010 and to promote mobility of professionals in the European Union as well as to enhance professional qualifications and the quality of European universities. The proposal of a common structure including bachelor, master and doctoral studies, the establishment of the European Credit Transfer System (ECTS) and the introduction of the Diploma Supplement to enhance the transparency of knowledge and qualifications delivered in the Diploma, are the main issues that the Ministries of Education of European countries agreed upon.

An experiment in international social science cooperation. A dozen years in review. ENOP Reports, No. 1, 1994. Paris: Maison des Sciences de l'Homme.

Roe, R.A., P. Coetsier, Cl. Levy Léboyer, J.M. Peiró, B.Wilpert (1994). The teaching of Work and Organizational Psychology in Europe. Towards the development of a Reference Model. *The European Work & Organizational Psychologist*, 4 (4), 355-365.

In the field of Psychology a working group of European psychologists defined a framework for education, funded by EU's Leonardo da Vinci Program (Lunt et al. 2001; Lunt, 2002)³. The resulting document, entitled 'EuroPsyT. A framework for education and training for Psychologists in Europe' was published and adopted by EFPA in 2001. In the second Leonardo Project, the European Diploma of Psychology (EuroPsy) has been developed with the aim "to set a standard with regard to dependent and/or independent practice in one or more professional contexts, at the point of entry in the profession. The standard defines minimum requirements which individual psychologists are likely to exceed". The Diploma was also adopted by EFPA in 2005 (www.efpa.be). One of the three contexts of practice is Work & Organizational psychology.

Meanwhile, there have been scientific and professional developments, as well as innovations in theories, technologies, contexts of practice, clients etc. that have raised the demands for quality in services of Work and Organizational Psychology. Moreover, internationalization of the discipline and mobility of professionals in Europe is becoming more and more frequent.

In this context, EAWOP, in coordination with ENOP, has created a Task Force to formulate a proposal about the contents and requirements of the Advanced Diploma in Work and Organizational Psychology. The Task Force consisted of José M. Peiró (chair), Lourdes Munduate (link with EAWOP Ex. Com.), Marco Depolo, Robert Roe, Branimir Sverko and Matti Vartiainen. All of them were members of EAWOP and three of them also members of ENOP. The Task Force has reported on its activities at the XII and XIII European Congresses of Work and Organizational Psychology, at the 2006 and 2007 ENOP Annual symposia and in several meetings of EAWOP Constituents that took place during the same period of time. The present document is one of the outputs of this Task Force. It intends to facilitate the further harmonization of W&O psychology education and professional practice in Europe. It defines two sets of standards for the education of W&O psychologists, at the basic and an advanced level. These standards indicate the minimum requirements that curricula should meet in order to be considered as providing the necessary academic and professional preparation for the two levels of professional practice in W&O psychology.

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³ Lunt, I. (2002). A common framework for the training of psychologists in Europe. *European Psychologist*, 7, 180–191. Lunt, I., Bartram, D., Döpping, J. Georgas, J., Jern, S., Job, R., Lecuyer, R., Newstead, S., Nieminen, P., Odland, S., Peiró, J.M., Poortinga, Y., Roe, R., Wilpert, B. & Herman, E. (2001). *EuroPsyT – a framework for education and training for psychologists in Europe*. Available from EFPPA, Brussels.

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1. Introduction

This document describes the structure and contents of an academic curriculum that provides the necessary qualifications for those who want to work in the areas of W&O Psychology. It provides two sets of standards. The first specifies the requirements that have to be met by those who want to become psychologists in Europe and work in the field of W&O Psychology without being a W&O Psychologist. The second one specifies the requirements for those who want to become a registered European 'W&O psychologist'. These two levels of occupational practice will be referred to as basic and advanced.

It should be acknowledged that the curriculum described here only covers the academic education for these two levels of occupational activity, and thereby addresses only part of the process by which W&O psychologists acquire and maintain their qualifications. However, the contents of the curriculum can be adapted and used in the post-master education. In most European countries there exists a system of further preparation for professional activity as well as for continued education meant for those who have graduated from the university. For professional work such ongoing education typically includes post academic training courses, supervised practice and accreditation. For research work there are advanced training courses and workshops, Ph.D. programmes etc.

The structure of both types of curriculum is laid down in a model, the so-called Reference Model, while their contents are specified in Minimum Standards. These two parts together can be considered to define 'common core' of qualifications W&O psychologists need to have, i.e. the required knowledge, skills, attitudes, and competences.

The curriculum is supposed to be a part of the university based education programme in psychology. This means that certain knowledge and skills are assumed to be acquired outside the framework of the W&O curriculum, preferably before the curriculum starts. As entrance requirement a general education in psychology of 180 ECTS with the contents established in the European Certificate in Psychology (EuroPsy). For a full description of the minimum requirements and standards for the Curriculum of EuroPsy, see the documents and Annexes of EuroPsy.

According to the Bologna structure, as it is being implemented in Europe, the study of Psychology typically consists of three levels: a first level leading to a Propaedeutic or Bachelors Degree (BA), a second level leading to a Master's Degree (MA), and a third level ending with a Doctor's Degree (PhD). The first two levels are normally considered to be sufficient for becoming a psychologist (in some countries only after a special examination). Moreover, EuroPsy has established the minimum requirements of 300 ECTS plus 60 ECTS of supervised practice to be entitled to work as Psychologist in Europe.

The present document proposes a generic curriculum model that can be used in two ways. First, to specify the requirements that should be met by a psychologist who enters into supervised practice in the field of Work and Organizations in the context of EuroPsy. These requirements are formulated in terms of contents and a minimum number of credits that should be devoted to this content. Secondly, to specify the requirements for those who want to be accredited as European Work and Organizational Psychologist. These requirements are again formulated in terms of contents and numbers of credits, but now they cover bachelor, master and post-master phases.

The Reference Model only pertains to the education of W&O psychologists *stricto* sensu or to psychologists who aim to carry on their year of supervised practice in the field of Work and Organizations. It does not apply directly to training programmes for related specialities of professions,

even though such programmes may contain elements from W&O psychology, and those who studied W&O psychology are among those who practice such specialties or professions. Thus, the model does not pertain to the training in Ergonomics, Cognitive Engineering, Human Resource Management, Business Administration, Industrial Relations, and the like. However, as will be outlined below, the model can be used in verifying and improving the content of training programmes in such fields.

The starting point for the development of the Reference Model has been a view of 'what W&O psychology *is'* both as a discipline and a professional speciality, rather than the state of affairs at the labour market for work experts with a background in the behavioural sciences. It is recognized that the labour market is of great importance in determining the actual shape of W&O psychology as an occupation, but it is held inappropriate to let the diverse and changeable conditions of supply and demand for professionals, and the underlying economic mechanisms define the boundaries and content of the training of W&O psychologists. A consequence of this choice is that the model offers a balance between theory and methodology on the one hand, and practical skills and competences on the other hand.

The following sections of this document describe the structure and content of the model. The Reference Model and the Minimum Standards are normative in character, that is to say they represents the view of ENOP and EAWOP on the requirements a university curriculum should minimally meet in order to provide European W&O psychologists with the proper academic qualifications.

2. THE REFERENCE MODEL

The Reference Model shows the basic dimensions and structure of the curriculum, i.e. the major facets to be distinguished and the main content areas to be covered. Below the model's dimensions and overall structure are presented, and a generic description of its content is given. Moreover, a list of didactic methods suitable for presenting the content is given.

2.1. Dimensions

The model has four dimensions: educational objectives, fields of study, type of science, and depth-of-specialization which are described here below.

2.1.1. Educational objectives

Generally speaking four sets of educational objectives can be distinguished:

- a. the acquisition of knowledge
- b. the acquisition of skills
- the acquisition of competences for professional activity (intervention and development)
- d. the acquisition of competences for scientific research.

The term *knowledge* is used to refer to theories and concepts on work and organizational phenomena, to methods and techniques for studying them, and to empirical data. Knowledge should be conceived in a broad way. It includes the awareness of different approaches, the relationships between theories, etc. The term *skills* denotes the ability to apply knowledge and to effectively use methods, procedures and

techniques. *Professional competences* are complex sets of knowledge and skills by which problems encountered in professional practice can be solved. And *research competences* are similar sets of knowledge and skills needed in designing and conducting research studies.

While the dimension of educational objectives is of a general nature it is used in the Reference Model to refer to knowledge, skills, and problems that are typical for the world of work and organization. General research methods and strategies, although certainly important, are supposed to be dealt with in the context of the psychology curriculum as a whole, and hence be left out of consideration.

2.1.2. Fields of study

It is generally recognized that the discipline of W&O Psychology covers three fields of study, each of which focuses on different parts and aspects of human work activity. These fields are:

- work psychology
- personnel psychology
- organisational psychology.

Work psychology concerns people's work activity, i.e. the way in which people deal with their tasks in given contexts. Persons are seen as workers who (individually and collectively) perform tasks that are derived from the work processes taking place in the organization. Important subjects are: tasks, work environment, time arrangements, performance, error, effort, load, fatigue, well-being, task and job design, tool design, technology, (cf. ergonomics), etc.

Personnel psychology concerns the relationship between persons and the organization, in particular the establishment of the relationship, its development, and termination. Persons are seen as individuals who at a certain stage of their career become 'employees' of an organization. Important subjects are: choice processes of individuals and organizations, abilities and capabilities, skills and competences, needs and need fulfilment, commitment, methods of selection, career development, appraisal, rewarding, training and competence development etc.

Organizational psychology concerns the (collective) behaviour of people in relation to the shaping and functioning of socio-technical arrangements designated as organizations. People are involved in this arrangement as 'members'. Important subjects are: communication, decision making, power, leadership, participation, cooperation, conflict, organizational culture, organizational structure, technology, organizational change and development, intra and interorganisational relations etc.

It should be noted that in some countries different notions are being used, pertaining to combinations or cross-sections of the three fields mentioned here. Examples are: Industrial psychology, Occupational psychology, Organizational Behaviour and so on. The three fields of study have been chosen because they can be differentiated from one another rather well, in scientific as well as professional respect. In spite of some overlap, there are differences in terms of object of study and research methods on the one hand, and diagnostic and intervention methods on the other hand.

The relative development of the fields and the importance assigned to them have shown differences in the various European countries. In some countries there as been a single dominant area (e.g. work psychology in France, or in some Eastern European countries), in other countries one could see two main fields emerge (e.g. work psychology and organizational psychology in Sweden, or personnel psychology and organizational psychology in Spain), and so on. In other cases there has been a more balanced situation with a more or less equal position of the three fields (e.g. in Finland, Germany and the

Netherlands). Although differences in emphasis are still visible in both scientific research and teaching, and in professional activity, there is an apparent trend towards more balance between the three fields and a growing convergence between the European countries.

2.1.3. Type of science

The third distinction to be made is that between explanatory science, or science that tries to understand existing reality on the one hand, and technological or change-oriented science, that aims at changing reality on the other hand. While some disciplines are characterized by the prevalence of one of these types of sciences, this is not true for W&O psychology. As this discipline deals with a reality that is by its very nature created and modified by man, it has components of both technological and explanatory science. For example, one finds both theory on work performance and on performance optimization, on workers' abilities and personnel selection, or on organizational analysis and organizational design. The relative emphasis on either type of science shows some variation from country to country, though.

The distinction between science and technology referred to here, should not be confused with that between fundamental and applied research. Both explanatory science and technology have their fundamental research, and both can be applied by practitioners to singular problems of people or organizations. Research on principles of selection can be considered as an example of fundamental technological research. The explanation of a particular state of conflict that a client organization is in, a case of organizational diagnosis represents an example of applied explanatory science. And so on. The application of technology implies to use and/or design of intervention methods and artefacts (e.g., tests or appraisal procedures, reward or work-time systems, ergonomic work tools)

2.1.4. Depth-of-specialization

Theories and methods of W&O Psychology can be dealt with at various levels, differing in breadth of scope and degree of detail. It is assumed that in general three levels can be distinguished: (a) the level of systematic introduction, covering principles, methods and facts of a certain subject area, (b) the level of focused study of problems and methods, and (c) the level of detailed study of a particular issue. The curricula offered by different universities differ with respect to the level of depth reached and the topics of greater specialization. In this way universities show their unique profile and history. The Minimum Standards allow for such diversity, but they also emphasize the need for commonality at the lower levels of specialization.

2.1.5. Content and Methodology

All of the domains that are covered in the model should consider both contents and methodological aspects. In the methodological aspects both research and intervention methods should be taken into consideration.

2.2. Structure of the model

By crossing the four educational objectives (knowledge, skills, professional and research competences) by fields of study mentioned above a multidimensional matrix is obtained that shows the structure of the curriculum. For the purpose of graphic presentation the first three dimensions (educational objectives, fields of study and type of science) are selected and arranged in a two-dimensional layout in the following figure.

The fourth dimension (depth of specialization) and the fifth one (methodology) are not displayed, since they do play a minor role in the Minimum Standards. It should be born in mind that existing curricula may

differ in level of specialization, and that all curriculum components represented by the cells of the figure may differ with respect to this dimension.

Table 1: Reference Model

| WORK | PERSONNEL | ORGANIZATION | objective / type of science |
|--------------|--------------------------|--------------|--|
| | General course (G) | | Orientation |
| W1 | P1 | 01 | Knowledge of theories (explanatory) |
| W2 | P2 | O2 | Knowledge of theory (technological) |
| W3 | P3 | О3 | Diagnostic skills (explanatory) |
| W4 | P4 | O4 | Intervention and design skills (technological) |
| | Professional competences | | |
| (e.g. resear | Research competences | | |

2.3. Content of the model

The model as presented here helps to set a standard for the content which European curricula in W&O-psychology should meet. That is, it helps to provide an operational definition of the 'common core' of W&O-psychology as it has developed till the beginning of the 21st century. The model is described in two parts. First, the educational objectives are specified, taking into account the distinction between types of science. The objectives correspond to the rows of the above presented matrix. Secondly, a generic description is given of subject matter to be covered by each of the curriculum components. These components correspond with the cells of the matrix. A more detailed description of the curriculum components is given in the section on Minimum Standards.

2.3.1. Educational objectives

The following educational objectives should be met:

1) Orientation

Orientation means: the acquisition of (meta)knowledge about W&O psychology, the context in which it is developed and practised, both at a national level and in Europe, and the general methods of research and application.

2) Knowledge of explanatory theory

The knowledge to be obtained includes empirical knowledge about psychological phenomena related to work, employment relations and the functioning of organizations, as well as knowledge of theories by which such phenomena can be ordered and explained. It also includes meta-knowledge like the awareness of different approaches, the relationships between theories, etc.

3) Knowledge of technological theory

Technological knowledge or 'know-how' pertains to the ways in which the empirical reality of work and the psychological phenomena related to it can be influenced. It includes knowledge of the possibilities for the design of work, personnel management systems, and organizations, and the ways by which they can be implemented and changed. It includes meta-knowledge about different technological paradigms (e.g. selection, training, development) and their relationships.

4) Diagnostic skills

These skills relate to the use of methods, techniques and instruments by which psychological and organizational phenomena can be assessed, including tests, interviews, surveys, observation techniques, job analysis instruments, content analysis, etc.

5) Intervention skills

These skills concern the (re)design of tasks, tools and environments, as well as personnel management programmes (e.g., selection, training and organizational interventions, team building and organizational development). They also concern the implementation of the tools for change management. Skills also cover competence development and participative interventions.

6) Professional competences

These competences include intake, diagnosis, planning, intervention, development, evaluation, reporting, and documentation with regard to a particular type of problem posed by an individual or organizational client. Communication, client participation, and professional ethics are aspects deserving special attention. Moreover, at least basic competences in design and development of new instruments, technology and tools for professional intervention should be acquired,

7) Research competences

Research competences relate to the formulating a research problem, retrieving and reviewing existing evidence, making a research design, sampling, getting access to respondents, data collection, analysis, reporting and documentation.

2.3.2. Curriculum components

Curriculum components are defined as parts of the curriculum covering the knowledge, skills, and competences to be acquired by the students with respect to the various combinations of fields of study and types of science. They are described in terms of topics to be studied and mastered by the students.

1) Courses

Most curriculum components can be operationalized by means of courses or other teaching activities. For the sake of convenience we make a distinction between: courses, apprenticeship (stage) and research projects. It should be kept in mind that courses may take on different didactical forms. The same is true for stages and research projects.

In terms of their content courses may be either 'pure', that is only deal with the particular subject falling into a single cell of the model or be 'integrative' (or 'mixed'), that is cover two or more cells. Courses can also be differentiated in terms of depth-of-specialization. In a good curriculum both types of courses should be present. Pure courses offer a basis for a systematic development of declarative or procedural knowledge, while integrative courses help to make connections between various components and domains of knowledge. Integration is often sought along the lines of a problem, a theme and a professional role. Integration can also take place along specific dimensions of the model, e.g. from theory to skills (dimension I), across fields of study (dimension II), from existing reality to change (dimension III). Moreover, integration can be achieved on the basis of a theoretical or methodological approach (e.g. cognitive theories, or qualitative methods).

2) Apprenticeship (stage)

The general aim of the stage is to familiarize the student with the professional setting and activity of W&O psychologists, and to acquire basic professional competences as described above. This is achieved by involving the student in a professional activity that brings him into contact with a client (organization) and a typical problem. Typically the student learns to work independently while being supervised by an expert. Different types of stages can be distinguished, like e.g.:

- 1. orientation type: familiarization to a certain professional setting
- 2. safari type: temporary presence in the setting for a particular purpose (e.g. the collection of data)
- 3. rotation type: systematic familiarization with different parts of an organization, different roles, etc.
- 4. role type: learning to fulfil a particular professional role
- 5. project type: performing a project (individually or in a team) defined by a company or the university.

3) Research project

The general aim of the research project is to develop research competences as were described above, by setting up and executing a research study under supervision by an experienced researcher. Projects can use a variety of methods, and include field experiments. Field studies, case studies, surveys, laboratory studies, and so on. They can be performed in companies as well as in university settings. Typically research projects include a study of the literature on a certain issue.

2.4. Didactics

Didactic methods are of great importance for in the training of W&O-psychology Table 2). Particularly important is that methods used to confront the students with the reality of work and organization, as it exists in Europe, both in the classroom setting and outside of it. The professional and research competences deserve special attention as well, as they have some unique features not found in other fields of psychological study. There is a need to disseminate the best didactic methods in order to improve the general effectiveness and efficiency of training. Table 2 shows some didactic methods

currently in use in European W&O curricula, structured according to the type of educational objective served.

Table 2: Examples of didactic methods

| Knowledge | Skills | |
|---|---|--|
| 1. Lecture 2. Lecture & questions 3. Demonstration 4. Audiovisual 5. learning environments (computer based conferences) 6. Practitioner's report / guest lecture 7. Student reading | 8. Exercise (use of technique or tool) 9. Computer exercises 10. Simulation / role play 11. Student assignment 12. Student group assignment 13. Case study 14. Problem based tasks. | |
| Knowledge | e & skills | |
| 15. Discussion meeting16. Small group discussion17. Student oral presentation18. Student paper19. Site visit / excursion | | |

3. MINIMUM STANDARDS

This chapter describes the minimum requirements concerning the size and contents of the basic and advanced education within the W&O curriculum as needed for becoming a Registered European Psychologist working in the field of W&O Psychology (basic level), or a Registered European W&O Psychologist (advanced level). Therefore it operationally defines the basic academic qualifications needed to become a W&O psychologist, and the requirements for specialization within the discipline of W&O psychology below a definition is given of the units used for quantifying the curriculum components, the total size of the curriculum, and the composition of the curriculum.

3.1. Curriculum unit

In order to describe curricula and to formulate requirements ECTS units (henceforth: credits) are used. One credit is typically understood to be equivalent to 25-30 hours of student's work, assuming that at least around a third are contact hours.

3.2. Total size of the curriculum

There are two sets of requirements concerning the W&O psychology curriculum at a basic and advanced level. At the basic level, corresponding to EuroPsy, there are minimum requirements for admission to supervised work in the field of work & organization. At the advanced level there are requirements concerning the qualification as European W&O psychologists. The basic level requires at

least 30 credits, and the advanced level requires at least 120 credits as specified in the following section (Composition of the curriculum).

3.3. Composition of the curriculum

The curriculum must cover all curriculum components outlined in the preceding chapter. However, there may be differences in emphasis on fields of study and/or types of educational objectives. The following figures express the limits within which the composition of the curriculum may vary. They provide a flexible definition of the 'common core' of European W&O psychology in operational terms.

The requirements are presented in two tables (3a and 3b). The first one presents the minimum standards to be applied in EuroPsy to get admitted to supervised work in the field of W&O Psychology. The second table presents the minimum standards for obtaining the Advanced European certificate in W&O Psychology.

Table 3a should be understood as follows:

- 1. At least 6 credits must be devoted to each of the fields of work, personnel and organization.
- 2. Minimally 2 credits must be devoted to an orientation course.
- Minimally 12 credits must be assigned to theoretical courses. No requirement is formulated concerning the balance between the two types of knowledge (explanatory and technological). However both should be represented in the curriculum.
- 4. Minimally 12 credits to be devoted to courses on diagnostic and intervention skills. No requirement is formulated concerning the balance between the two types of skills. However both should be represented in the curriculum.
- 5. A stage and/or research project is recommended. It is held desirable that students follow both a stage and a research project. No minimum size for each is considered

Table 3a – W&O Psychology Reference Model: Minimum standards for EuroPsy (basic level)

| min. 6 | min. 6 | Min. 6 | |
|--------|--------------------|--------------|--------------|
| Work | Personnel | Organization | |
| | Orientation course | | min. 2 |
| C | min. 12 | | |
| | min. 12 | | |
| S | recommended | | |
| Total | | | min. 30 ECTS |

It is intended that only people able to show such minimum requirements can enter into the WO field for supervised practice in the context of EuroPsy

Table 3b - W&O Psychology Reference Model: Minimum standards for Advanced European Certificate in W&O Psychology (advanced level, including the minimum standard for EuroPsy).

| min. 12 | min. 12 | min. 12 | |
|---|---------------------|----------------|---------------|
| Work | Personnel | Organization | |
| Courses on ex | cplanatory & techno | logical theory | min. 18 |
| Courses on diagnostic, instrument development & Intervention skills | | | min. 24 |
| Stage & research project | | | min. 30 |
| Total W&O Psychology | | | min. 90 ECTS |
| Other subjects | | | |
| | Total | | min. 120 ECTS |

Table 3b should be understood as follows:

- 1. At least 12 credits must be devoted to each of the fields of work, personnel and organization.
- Minimally 18 credits must be assigned to theoretical courses. No requirement is formulated concerning the balance between the two types of knowledge. However both should be represented in the curriculum.
- Minimally 24 credits to be devoted to courses on diagnostic and intervention skills. No requirement is formulated concerning the balance between the two types of skills. However both should be represented in the curriculum.
- 4. Minimally 30 credits must be assigned to a stage and/or research project. It is held desirable that students follow both a stage and a research project.
- Work, personnel and organization psychology contents must totalize at least 90 credits. Since
 the whole curriculum consists of at least 120 credits, there is room for a variable amount of
 credits in other subjects.

It is intended that only people able to show such minimum requirements can start the procedure for the qualification corresponding to the Advanced European Certificate in W&O Psychology.

3.4. Content of the curriculum

The requirements concerning the content of the curriculum are described in terms of the specific objectives to be reached and areas (cells of the matrix) to be covered. For each of the curriculum components (cells of the matrix) the objectives and contents are defined. Below in this section we describe a generic and comprehensive account of the content that is ideally covered in a W&O Psychology curriculum. A description is given of different curriculum components (cells) organized in terms of fields, type of knowledge and education objectives.

In evaluating the curricula that applicants have studied, certain coverage of this content is required. Although, there are considerable degrees of freedom regarding the make up of their curricula, there are certain minimum requirements to be fulfilled. This applies both to the basic and the advanced level.

3.4.1. Orientation course

The orientation course must enable the student to acquire general knowledge about work & organizational psychology as a discipline and professional field, its object of study, typical problems addressed, main theoretical approaches, some typical concepts and methods, forms of practice, ethical and legal aspects of the profession. The course must devote attention to the relationship between work and other domains of human life and activity, as well as to the relationship between W&O psychology and adjacent fields of science (i.e. other disciplines dealing with work and organization, and other fields of psychology), both with special reference to the European context. To be included are the meaning of work, work values and attitudes, quality of work and unemployment.

3.4.2. Courses on explanatory theory

W1. Courses in work psychology should enable the student to obtain knowledge about the main psychological theories on work as an individual and collective activity. Attention should be devoted to the mental, physical and social processes involved in goal-directed action and the regulation thereof, performance (including errors), work outcomes, and adaptation, as well as to various personal and situational conditions and concomitants. To be covered with respect to the person are: knowledge, skills, competences, motivation, emotions, functional states, fatigue, stress, and satisfaction, and with respect to the situation: working conditions, work processes, tasks, tools, information, working conditions, temporal arrangements, hazards and risks.

P1. Courses on personnel psychology should enable the student to obtain knowledge about the main psychological concepts and theories concerning work careers and the employment relationship and human resources. To be covered are theories of careers and career development both within a life-span perspective (needs, values, interests, goals, career anchors, competences, life span, career stages, career transitions, career choice, types of careers, job insecurity and unemployment), and an organizational perspective (organizational entry, organizational socialization, models of organizational careers, the psychological contract, retirement). Also to be covered are theories on the psychological facets of human resources management and development as far as relating to the employment relationship, including recruitment, appraisal, selection, placement, training, career planning, outplacement, career development, performance management and reward systems). Furthermore, attention must be given to contextual factors influencing careers and employment relations, such as changes in industrial relations, the labour market, new organizational forms, and the intersection of work and non-work roles.

O1. Courses on organizational psychology should provide the student with basic theoretical knowledge about organizational phenomena and the way in which they are influenced by and exert influence on psychological factors and processes related to individual and group and organizational behaviour. The organizational phenomena include organizational structure, inter and intra group processes, power, conflict, cooperation, communication, decision-making, participation, organizational procedures, leadership, climate and culture, values, organizational learning, organizational performance, commitment, identification, interorganisational relations and organizational environments. The topics are to be dealt with from the perspective of major theoretical approaches, including organizational growth, bureaucratic theory, systems theory, role theory, field theory, structuration theory and social constructionism. Attention should also be given to empirical trends, i.e. the emergence of new organizational forms, such as network organizations and mobile virtual organizations.

3.4.3. Courses on technological theory

- W2. The courses should provide the student with know-how concerning interventions in the field of work, such as development of work places, job and task design, work process design, the design and improvement of work methods and tools, work time arrangements, design of technology and software, design of teams, as well as skill training and competence development. Attention is to be paid to the main theoretical approaches for optimizing outcomes, including sociotechnical system approaches, humanization of work, quality of work, and ergonomics, as well as to the different types of criteria involved, i.e. effectiveness, satisfaction, work load, safety, stress and health.
- P2. The courses should provide the student with know-how about career choice and development, management development, skill training, competence development, manpower planning, personnel recruitment and selection, performance evaluation and remuneration, industrial relations techniques. To be included are methods for the analysis of jobs, tests and other assessment techniques, methods for decision-making and utility assessment, as well as methods for career counselling and training (including training need analysis). The students should be familiarized with the design of systems to fulfil these functions, and with various aspects of the professional role of the psychologist using these methods and systems.
- O2. The courses should provide the student with know-how about psychological interventions in the field of organizations, both aiming at the design or planned change of systems (or subsystems) and at organizational transformation and development. Students should understand the interrelationships of specific intervention techniques with organizational intervention paradigms. Topics to be covered include: theories of organizational change and learning, approaches to organizational design and redesign and approaches to organizational development such as action research. Specific topics like leadership and participation with regard to organizational change, team development, conflict management and resistance to change should also be covered.

3.4.4. Diagnostic skill courses

- W3. The courses should give the student an overview of approaches and methods for various types of work analysis, show how to find more detailed information about particular methods and tools, and provide the opportunity to select and apply such methods and tools in at least two specific domains. Relevant types of work analysis are: work process analysis, task and job analysis, work requirement analysis, activity analysis, analysis of human functional states (activation and effort, emotions, fatigue, boredom, stress, body rhythms etc.), the analysis of performance and work outcomes, error diagnosis, the evaluation of working conditions, work risk analysis, analysis of work group interdependencies, analysis of social interaction and cooperative work. Among the methods to be covered are: use of secondary data observation techniques, psychophysiological measurements rating scales, interviews, questionnaires, qualitative methods.
- P3. The courses should give the student an overview of approaches and methods for individual assessment, and show how to find more detailed information about particular methods and tools for the assessment of people's needs, cognitions, emotions, interests, values, life goals, and career objectives, as well as abilities, skills, competences and performance. The student should learn to compose a procedure for either career development, selection, evaluation, remuneration or training, incorporating such methods. Moreover, the student should learn to apply interviews and tests to measure a particular range of individual characteristics and/or performance.

O3. The courses should give the student an overview of approaches and methods for various types of organizational analysis, show how to find more detailed information about particular methods and tools for the diagnosis of organizational states and processes, and the assessment of organizational parameters and outcomes. The student should be given the opportunity to select and use two or more of such methods and tools within the context of organizational change and organization development. Among the methods to be covered are: observation techniques, document analysis, survey techniques, work flow analysis, communication analysis, safety and quality audits, analysis of organizational climate and culture, and organizational structure analysis.

3.4.5. Intervention skill courses

W4. The courses should give the student an overview of approaches and methods for intervention methods relating to the (re)design of work and the optimization of human work activity, and show how to find more detailed information on particular methods. The student should be given the opportunity to select and apply two or more intervention methods. The intervention methods may relate to work process design, job or task design, the design and improvement of work methods and tools, work time arrangements, work teams, as well as skill training and competence development.

P4. The courses should give the student an overview of approaches and methods for intervention relating to career development, selection, evaluation, remuneration or training, and show how to find more detailed information on particular methods. The student should be given the opportunity to select and apply two or more intervention methods, taking into account the results of relevant assessments. Applying the methods implies: organizing and conducting consulting sessions, providing feedback, guidance, advice, or training, communicating with employees, managers, and relevant others, effectively deal with resistance, conflicts and complaints, and implementing administrative measures.

O4. The courses should give the student an overview of approaches and methods for organizational design and functioning, and show how to find more detailed information on particular methods. The student should be given the opportunity to select and apply two or more intervention methods. Relevant are: general approaches to organizational design and development, as well as specific methods such as group feedback analysis, and intervention methods related to the introduction new technologies, quality control and assurance, conflict mediation, conflict management, team development, team building, communication system design, design of safety, health and environmental protection systems.

3.4.6. Apprenticeship

The apprenticeship (stage) should give the student the opportunity to work on a particular type of problem posed by an individual or organizational client, while supervised by a qualified psychologist. This should help the student to develop competences such as: intake, diagnosis, planning, intervention, evaluation, reporting, and documentation. Special consideration should be given to communication, client participation, and professional ethics. Apprenticeships should be performed on the basis of a plan and concluded with a report.

3.4.7. Research project

The research project should give the student the opportunity to answer a generic question in a scientifically valid way. This should help the student to develop research competences related to the formulating a research problem, retrieving and reviewing existing knowledge, making a research design, sampling, getting access to respondents, data collection, analysis, reporting and documentation. Research projects should be performed on the basis of a plan and concluded with a report.

3.5. Didactics

It is acknowledged that educational objectives can be achieved in very different ways. Since the results are considered to be more important than the ways in which they are achieved, these Minimum Standards do not pose requirements other than that the didactic methods be appropriate to achieve the educational objectives. It is held desirable, though, that guidelines on didactics be developed in the near future and that 'good practice' examples are being disseminated.

4. Use of the Reference Model and Minimum Standards

The Reference Model and the two sets of Minimum Standards can be used for various purposes. Its main functions are to serve as

- 1. a guideline for curriculum design
- 2. a standard for evaluating curricula
- an aid in promotional activities.
- 4. a tool for the accreditation of psychologists

These four functions are specified below.

4.1. Curriculum design

The Reference Model and Minimum Standards for basic and advanced level should, first of all, be considered as a guideline to be followed by those who wish to provide a basic training in W&O psychology to psychology students or an advanced training for those aiming to achieve a specialized or expert qualification in the field. The model will help curriculum designers and teachers to give current W&O programmes the appropriate content and stimulate curriculum innovation, both at the basic and advanced level. A wide-scale use of the Reference Model will help to achieve convergence of curricula in terms of structure and contents, which enhances the opportunities for the harmonization of teaching in Europe, and indirectly facilitates future cooperation and exchange, as well as the mobility of professionals across Europe.

Several design options are possible to fulfil these requirements. One option could be to include all the educational requirements in a specialized Master (such as the Erasmus Mundus on Work, Organizational and Personnel Psychology: www.erasmuswop.org). Another option could be to organize Work and Organization Psychology education as post-master studies (such as Specialization training Program in W&O Psychology in Finland: www.psykonet.fi). Other mixed alternatives are possible: it should be clearly intended that this Reference Model do not dictate any compulsory design option to reach the above mentioned educational goals.

4.2. Curriculum evaluation

ENOP and EAWOP will promote the use of the Reference Model and Minimum Standards as a standard for evaluation by installing an evaluation body, that will invite European universities and Institutions interested to submit their existing curricula for evaluation. Universities may also submit their curriculum

upon their own initiative and ask for an evaluation. Curricula which satisfy all requirements will be recognized as conforming to the Reference Model. When a curriculum does not fully meet the criteria its deficiencies will be noted and recommendations for revision will be given.

4.3. Promotion of W&O psychology

Another use of the Reference Model and Minimum Standards will be to support promotional activities aiming at exhibiting the profile of European W&O psychology and its differences compared to other specialties in psychology as well as other professions.

4.4. Certification of psychologists

The Reference Model and the minimum standards presented here have been designed for the purpose of accreditation. They serve as a tool to establish whether a psychologist is qualified to

- 1) enter into supervised practice in the field of W&O Psychology in the context of EuroPsy.
- 2) Obtain the Advanced European Certificate in W&O psychology.

It is recommended that this reference model and standards be used in connection with the EuroPsy system as managed by EFPA and the awarding of the Advanced Certificate in W&O Psychology by EAWOP.

Appendix 3. Competences and Competence Assessment

W&O psychologists develop and apply psychological principles, knowledge, models and methods in an ethically and scientifically sound way in order to promote the development, well-being and performance of individuals, groups, organizations and society. The competences that W&O psychologists should possess can be categorized in similar terms as the competences of psychologists in general described in EuroPsy. The competences can be divided in two main groups:

primary (or professional) competences, related to the content of the profession, and secondary (or enabling) competences allowing the professional to effectively render services to clients.

The primary competences are unique for the each profession as they relate to the specific nature of clients' problems and kinds of knowledge, skills and interventions involved. The enabling competences are shared with other professions. Both types of competences are required for rendering services in an effective professionally adequate way.

Professional competences

There are 20 professional competences; these can be grouped into six categories, which relate to professional functions (sometimes also referred to as 'roles'). These functions are:

- A. Goal specification
- B. Assessment
- C. Development
- D. Intervention
- E. Evaluation
- F. Communication.

Enabling competences

There are eight enabling competences, relating to professional activity in general, which psychologists should acquire in addition to the primary competences.

- 1. Professional strategy
- 2. Continuing professional development
- 3. Professional relations
- 4. Research and development
- 5. Marketing & sales
- 6. Account management
- 7. Practice management
- 8. Quality assurance

Competences of W&O psychologists

A general requirement of EuroPsy is that psychologists should gain each of the competences as far as needed within a particular professional context. Although EuroPsy makes a distinction between broad professional contexts, including Education, Health care, Work & Organization, there are no specific guidelines concerning the competences that are needed for psychologists who want to obtain the European Certificate in Psychology, with W&O psychology as the area of practice. Yet, such a specification is indispensable if one wants to promote the development and assessment of competences in this area. On the following pages we present a description of the competences as required in this professional domain. They are specified according to the three main subfields of Work, Personnel and Organization. The competence requirements are, of course, different for the basic and the advanced level, which will be described in the next paragraph.

Assessment of competences

EuroPsy has proposed the scale presented underneath to assess psychologists competences (the scale has been already presented and commented in Section 4 of the Report (see: Preparation and Assessment of Competences paragraph). The four categories of this scale refer to the complexity of the professional activities to which the competences relate and the distinction between dependent and independent practice (that is, with and without guidance and supervision). The scales can be used for formative assessment during competences development, and for summative assessment at the moment of applying for a certificate.

| 1 | 2 | 3 | 4 |
|------------------------|----------------------|------------------|--------------------|
| Basic knowledge | Competence for | Competence for | Competence for |
| and skill present, but | performing tasks but | performing basic | performing complex |
| competence | requiring guidance | tasks without | tasks without |
| insufficiently | and supervision | guidance or | guidance or |
| developed | | supervision | supervision |

Summative assessments are to be made on the basis of the evidence presented by the candidate at the moment of application. The assessment standards differ for the basic and the advanced level. For the basic level, the standards as given by EuroPsy apply. That is, the degree of competence must be such that the psychologist can be expected to perform each of the six professional functions (indicated as A till F; see the previous paragraph) in an adequate manner and independently. On the rating scale the psychologist must attain the level 3 (Competence for performing basic tasks without guidance or supervision) for each of the functions. For the advanced level, the requirement is that the psychologist attains the level 4 (Competence for performing complex tasks without guidance or supervision) for each of the functions. Moreover, the psychologist must demonstrate specific competences

for each of the functions. The requirement is at least 2 of the competences for each function are present, and in total 15 of the 20 professional competences. For the enabling competences the standards differ as well: for the basic level the overall assessment must be sufficient, whereas for the advanced level there must be a sufficient rating for at least 6 out of the 8 competences.

Competences of W&O Psychologists

| PRIMARY COMPETENCES | W&O Psychology | | | | |
|---|---|---|--|--|--|
| FRIMARY COMPETENCES | Work | Personnel | Organization | | |
| Goal definition | | | | | |
| 1. Needs analysis competence | among employees) | and problems (e.g., need for recruitment of new perify them in a way that is understood and accepted | | | |
| | Conduct a study to gather information on needs and problems regarding performance and errors, workload and stress, health and safety. Identify necessary and possible improvements through changes in working conditions, work processes, tasks, work methods, etc. Example: workplace improvement needs. | needs and problems regarding performance and errors, workload and stress, health and safety. Identify necessary and possible improvements through changes in working conditions, work processes, tasks, work methods, etc. needs and problems regarding numbers, levels of competences, motivation and performance of effectiveness, flexibil dentify necessary and possible improvements through changes in staffing and other HR practices. needs and problems regarding numbers, levels of competences, motivation and performance of effectiveness, flexibil dentify necessary and possible improvements through changes in staffing and other HR practices. Example: organization needs and problems regarding numbers, levels needs and problems regarding | | | |
| 2. Goal setting competence | Make an oral / written proposal for objectives and how they can be achieved. Propose criteria to evaluate improvement outcomes. Example: W&O project proposal. | | | | |
| Assessment (also: Diagnosis) | | | | | |
| 3. Individual assessment Select and apply instruments, techniques and methods (such as interviews, tests, observations, ratings) for individual assessment of performance and errors, workload and stress, health and safety. | | Select and apply instruments, techniques and methods (such as interviews, tests, observations, ratings) for individual assessment of personality, ability, competence, motivation and performance. Example: job applicant testing. | Select and apply instruments, techniques and methods (such as questionnaires and interviews) for assessment of individual perceptions and attitudes regarding organizational relations and practices. Example: administering employee satisfaction surveys. | | |

| 4. Group assessment competence | Select and apply techniques and methods for | Select and apply techniques and methods for | Select and apply techniques and methods |
|--------------------------------|---|---|--|
| | group assessment (such as group interviews, | group assessment (such as group interviews, | (such as group interviews, focus groups, |
| | focus groups) of perceptions, attitudes and | focus groups) of perceptions, attitudes and | observations, role analysis, network analysis) |
| | behaviors related to performance and errors, | behaviors related to careers and HR practices. | for group-level assessment of perceptions, |
| | workload and stress, health and safety. | Example: focus groups on rewards systems. | attitudes and behaviors related to |
| | Example: group performance | | organizational structure, culture and |
| | measurement. | | management. |
| | | | Example: team role analysis. |
| 5. Organizational assessment | Select and apply techniques and methods | Select and apply techniques and methods | Select and apply techniques and methods |
| | (such as employee surveys) for assessing | (such as employee surveys) for assessing | (such as employee / customer surveys, |
| competence | perceptions, attitudes and behaviors related to | perceptions, attitudes and behaviors related to | network analysis) for organization-level |
| | performance and errors, workload and stress, | HR practices. | assessment of perceptions, attitudes and |
| | health and safety. | Example: HR audits. | behaviors related to structure, culture and |
| | Example: health audits. | Select and apply instruments, techniques and | management. |
| | | methods (such as interviews, tests, | Example: assessment of organizational |
| | | observations, ratings) for psychological | climate and culture. |
| | | analysis of the workforce. | Select and apply techniques and methods for |
| | | Example: competence assessment. | direct assessment of structure, culture, and |
| | | | management with regard to effectiveness, |
| | | | flexibility, and innovation. |
| | | | Example: network analysis. |
| 6. Situational assessment | Select and apply instruments, techniques and | Select and apply instruments, techniques and | Select and apply instruments, techniques and |
| aamnatanaa | methods (such as cognitive task analysis, | methods (such as job analysis, personnel flow | methods (such as structure analysis, process |
| competence | analysis of physical working conditions) for | analysis) for the assessment of needed | analysis, network analysis) for the assessment |
| also: Work context assessment | the assessment of workplace characteristics | workforce characteristics. | of organizational structure and context. |
| competence | relevant for performance and errors, workload | Example: job analysis. | Example: stakeholder analysis. |
| • | and stress, health and safety. | | |
| | Example: safety and risk analysis. | | |
| | | | |
| | | | |
| | | | |

| Development (also: Design) | | | | | |
|---|---|--|--|--|--|
| 7. Product definition & requirement analysis competence | Analyze the need for instruments and methods to be used for assessment (such as work process analysis, task analysis, job analysis, competence analysis, appraisal, communication analysis) and/or intervention (such as coaching, training, team building, organizational change projects). Example: program of requirement for appraisal system. | | | | |
| 8. Product design competence | Design and/or adapt techniques and methods for workplace analysis. Design methods for assessing work demands work load etc. Develop work processes. Develop work procedures. Develop shift work schedules. Example: development of shift work schedule. | Design and/or adapt psychological tests and test batteries. Develop a training program. Develop appraisal instruments. Develop a system for personal development, competence management, performance management. Example: development of training program. | Design and/or adapt methods for assessing and analyzing employee perceptions, attitudes and behaviors related to structure, culture and management. Example: questionnaire development. Design and/or adapt methods for training managers, changing organizational structure, culture and management. Example: development of culture change program. | | |
| 9. Product testing competence | Conduct a study to compare instruments (e.g. te effectiveness and costs benefits. Investigate reliability and validity of observation instruments. Example: validation or workload scales. | Investigate reliability and validity of tests. Example: validation of tests. | Investigate reliability and validity of employed surveys. Example: validation of employee surveys. | | |
| 10. Product evaluation competence | Conduct study to establish effectiveness, client Example: utility analysis. (4) | l satisfaction, user friendliness, costs-benefits. | | | |

| Intervention (and implementation | on) | | | | |
|--|--|---|--|--|--|
| Intervention planning competence Direct person-oriented intervention competence | Define goals and elaborate intervention plans. Make a work plan and time schedule for interventions. Example: a project plan for organizational change. Work load management Stress management Recruitment, executive search, selection Training Team development | | | | |
| mor vention competence | Health counseling Personalized training Example: stress management coaching. | Conflict resolution, mediation Coaching Career and life counseling. Example: career coaching. | Culture interventions Example: team building. | | |
| 13. Direct context-oriented intervention competence | Task and job design Support workplace improvement Example: job design. | Placement Career system development Reward system design Example: design of a bonus pay system. | Support organizational re-design Support organizational change Example: organization development. | | |
| 14. Indirect intervention competence | Advice, training and support for employees, managers, works council members regarding work load and stress management Example: advice to managers. | Advice, training and support for employees, managers, work council members regarding recruitment, selection, career development and other HR activities. Alignment and coordination of HR-activities. Example: recruiter training. | Advice, training and support for employees, managers, works council members regarding communication, decision-making, leadership, organizational change. Example: manager training. | | |
| 15. Product implementation competence | Implement instruments, techniques and methods for optimizing working conditions and improving performance, safety or health. Example: implementing ergonomic workplace improvements. | Implement appraisal systems Example: implementation of new appraisal system. | Implement instruments, techniques and methods for optimizing as well as new work tools. Help to implement a new method or procedure (e.g., a new employee reward system). Example: implementation of self-managing teams. | | |

| Evaluation | | | | | | |
|--|---|---|---|--|--|--|
| 16. Evaluation planning competence | Plan for the evaluation of programs and interve Example: write a plan for an evaluation study | Plan for the evaluation of programs and interventions. Example: write a plan for an evaluation study. | | | | |
| | Plan for evaluation of workplace improvement, work load management, stress management, etc. | Plan for evaluation of selection, training, career development, etc. | Planning the evaluations of organizational restructuring, culture change, management change. | | | |
| 17. Evaluation measurement competence Assessment of criteria for performance, well-being, social relations | Measure criteria for the evaluation of work place improvement, work load management, stress management, etc. Example: stress intervention study. | Measure criteria for the evaluation of recruitment, selection, training course, career development etc. Example: selection validation study. | Measure criteria for the evaluation of organizational restructuring, culture change, management change. Example: change effectiveness study. | | | |
| 18. Evaluation analysis competence Analysis of intervention effectiveness | Carry out analyses in the context of an evaluation study. Formulate conclusions and recommendations on the outcomes of an evaluation study. Example: analysis of effectiveness and utility. | | | | | |
| Information | | | | | | |
| 19. Feedback-giving competence | Having individual sessions with employees and providing oral feedback on the results of assessments and interventions. Providing oral information on assessment results and interventions to managers. Present results to groups of employees and/or managers. Example: group presentation (audio-visual). | | | | | |
| 20. Report writing competence Reports on assessment, products designed, interventions, and evaluations | Write reports on the results of assessments and/or interventions for employees and managers. Write a technical report Example: assessment reports. | | | | | |

| ENABLING COMPETENCES | W&O Psychology |
|-----------------------------|---|
| 1. Professional strategy | Choose an appropriate strategy for dealing with the problem(s) posed, based on a reflection on the professional situation and one's own primary |
| | competences. |
| | ■ Explore markets, opportunities and threats |
| | ■ Define strengths and weaknesses |
| | ■ Analyze trends |
| | Set strategic goals |
| | ■ Develop business plan. |
| 2. Continuing professional | Update and develop primary and enabling competences, knowledge and skills in accordance with changes in the field and the standards and |
| development | requirements of the psychological profession, national and European regulations |
| and the second | ■ Keep up with new developments in theory of W&O psychology, methods of assessment and intervention. |
| | ■ Read journals, follow courses, attend conferences. |
| 3. Professional relations | Establish and maintain relationships with other professionals, as well as relevant organizations. |
| | Reviewing reports of colleagues |
| | ■ Coordinating with other consultants. Attending external meetings |
| | ■ Keeping in touch with external organizations |
| | ■ Testify in court as an expert witness. |
| 4. Research and development | Develop new products and services that have the potential to fulfill current or future clients' needs and generating new business. |
| | ■ Do research on problems in W&O psychology: do literature study, make research design, collect and analyze data statistically. |
| | Develop new ways for dealing with client problems, develop and improved instruments, techniques or methods. |
| | ■ Publish articles in academic and professional journals. |
| 5. Marketing & sales | Bring current and new products and services to the attention of actual or potential clients |
| | ■ Do advertising |
| | Contact potential clients |
| | ■ Making business offers |
| | Sell services |
| | ■ Provide after-sales services. |

| 6. Account management | Establish and maintain relationships with clients. |
|------------------------|---|
| | Monitor clients' needs and satisfactions |
| | Identify opportunities for expanding business. |
| 7. Practice management | Design and manage the practice from which services are rendered, whether as a small business or as part of a larger private or public organization, |
| | including financial, personnel, and operational aspects, providing leadership to employees. |
| | Organize and plan own activities |
| | Supervise activities of co-workers |
| | Write periodical and annual reports |
| | Keep work records |
| | Write and answer e-mails |
| | Attend meetings at the workplace |
| | Appraise co-workers |
| 8. Quality assurance | Establishing and maintaining a system for quality assurance for the practice as a whole |
| | |

Based on Extended Table by R.A. Roe & M, Vartiainen, December 27, 2006.

Appendix 4. Competence survey

Competences needed in W&O psychology practice: Survey among EAWOP Members⁴

INTRODUCTION

The European Association of Work and Organizational Psychology (EAWOP) has established a Task Force with the objective of defining the minimum standards that European Psychologists should meet in order to qualify for professional practice in the field of W&O Psychology. The accomplishment of this goal is seen as a further step in promoting the mobility of psychologists and quality of psychological professional services across Europe.

Two sets of standards have been proposed, at the basic and advanced level. The first specifies the requirements that have to be met by those who want to become psychologists in Europe and work in the field of W&O Psychology without being a W&O Psychologist (EuroPsy- Basic Level). The second one specifies the requirements for those who want to become a registered European 'W&O psychologists' (EuroPsy- Advanced Level). Two main questions addressed by the Task Force are:

• What are the minimum requirements for entry into supervised practice in the field of W&O Psychology in order to obtain the European Diploma in Psychology (EuroPsy)? (EuroPsy-Basic Level)

⁴ The survey was organized and this report prepared by the Task Force members Marco Depolo, Lourdes Munduate, Jose M. Peiro, Robert Roe, Branimir Šverko, and Matti Vartiainen. We would like to thank Johan Lönnblad for setting up the web survey, and to Zvonimir Galić, Roberto Martínez-Pecino and Isaac Pavón for data analyses.

What are the minimum requirements for obtaining the Advanced Diploma in W&O
Psychology that certify the competence for independent practice across the Europe?
(EuroPsy-Advanced Level)

The Task Force defined the minimum requirements in two different, but complementary ways: (a) in terms of the academic curriculum elements that need to be taken during the university studies (input approach), and (b) in terms of the competences that need to be acquired during practice (output approach). For defining the curriculum elements the Task Force has adopted the ENOP-EAWOP Curriculum Reference Model as a basis for inferring whether candidates have obtained the essential knowledge and skills. For an assessment of professional competences the Task Force adopted a system of competences described below. In order to judge whether these competences are relevant and required in various European countries the Task Force launched a web survey whose results are presented in this report.

The System for Assessing the Competences of W&O Psychologists

For successful practice in the field of W&O, both at the basic and advanced level, psychologists must have acquired certain competences beyond what he has learned during the academic study. Knowing the major theories of human behavior, understanding organizations and their changes, being able to conduct job analyses or to administer tests, is not sufficient. In addition, a practicing psychologist must be competent in recognizing and addressing clients' problems.

There are many and diverse conceptualizations of competences. As used here, the notion competence denotes the effective capacity to perform successfully job activities, that is, to adequately perform a task, duty or role in the context of a professional work setting. Competence is understood to integrate knowledge, skills, personal values and attitudes, and to be acquired through work experience and learning by doing (Bartram & Roe, 2005, 2008).

Psychologists' competences relate to the services they render to clients with the aim to promote the development, well-being and effectiveness of individuals, groups, organizations and society (Roe, 2002). Competence implies the use of scientific principles, knowledge, models and methods, and their application in an ethical and scientifically sound way. Competences are context specific and therefore differ across contexts of practice in which psychologists work. W&O psychologists should be competent in analyzing clients' goals, making the appropriate assessments, developing needed instruments, planning and carrying out appropriate interventions, evaluating effects, giving adequate feedback to clients, and so on – all in the context of work and organization. Although the academic study can provide necessary knowledge and skills, the required competences can only be developed through practice, through the interaction with clients in resolving their real problems.

The competences needed in the field of W&O Psychology can be described by the same framework as used by the EuroPsy. It includes twenty competences, divided into six functional groups or categories:

- Goal specification: Needs analysis: Goal setting
- Assessment: Individual; Group; Organizational; Situational
- Development: Product definition and requirements analysis; Design; Testing;
 Evaluation.
- Intervention: Planning; Direct person-oriented; Direct situation-oriented; Indirect;
 Product or service implementation.
- Evaluation: Planning; Measurement; Analysis.
- Communication: Giving feedback; Report writing.

In addition to these **primary or professional** competences, which reflect the content of the W&O Psychology profession, there are eight **secondary or enabling** competences, which all academic professionals should dispose of. The enabling competences help in the effective

use and development of professional competences. They comprise: Professional strategy, Continuous professional development, Professional relations, Research and development, Marketing and sales, Account management, Practice management and Quality assurance.

All brief description of these competences is given in Annex A. A more elaborate description of the competences, specified for the three subfields of W&O psychology and enriched with examples, was used as a basis for the survey.

EAWOP COMPETENCES SURVEY

Goal and purpose

The goal of the survey was to assess whether all of these 20 competences are considered important by European W&O psychologists. The survey also sought to find out whether there are any differences in their assessment among psychologists coming from different European regions or performing different professional roles. The purpose of the survey was to back the development of competence assessment system by the views of W&O psychologists across Europe.

Procedure

The survey instrument included a series of background questions about the employment status of the respondent, as well as the average number of hours worked per week, the job title and level, and major job activities. I addition it contained a series of biographical questions (e.g., country of residence and practice, age and gender, academic degrees, years of experience).

The central part of the questionnaire contained 20 professional competences (organized in 6 categories) and 8 enabling competences, all accompanied with short definitions. For each of the competences the participants were asked to answer two questions: (1) Is this competence required in your job? (2) Is this competence required for practicing W&O psychologists in general in your country? The possible responses were: 1. Not, really; 2. Yes, desirable; and 3. Yes, essential.

The answers were collected via a web questionnaire that was put at EAWOP website. In February, 2007, an invitation to join the survey was sent to the EAWOP members. All W&O psychologists, regardless whether they were practitioners, educators or researchers were invited to take part in this survey. In April a reminder to the potential participants was sent, and the possibility to reply to the survey was prolonged until June 2007.

Participants

Although the survey was open during four months, the number of participants was modest: altogether 613 participants completed the survey. Their ages ranged between 20 and 70 with an average of 42 years (SD 11.57); 30.8% reported to be males, 38.2% females, and the remaining did not report their gender. The number of years of experience as W&O psychologists ranged between 0 and 45 years, with an average of 13.45 years (SD 9.91). The number of hours worked per week ranged between 4 and 120, with an average of 40.57 hours (SD 11.44). Most of the participants (48.9%) had a bachelor or master in psychology, 4.1% a bachelor or master in other field, and 16% a Ph.D., while 31% did not give this information. According to their main job title, 21% were practicing W&O psychologists, 27% consultants, 11.2% educators, 22.5% researchers, and 18.3% selected another option.

When assessing the importance of competences for the W&O psychologist profession (Table 3 and Figure 4), these differences between professional roles are less visible. In spite of these differences it should be noted that the four professional groups rated all of the competences

as quite important. The lowest average ratings are around 2, which stands for "yes, desirable".

Table 1: Percentages of participants from various countries

| Country | % | Country | % |
|----------------|-----|-----------------|------|
| Austria | 0.2 | Latvia | 1.4 |
| Belgium | 1.7 | Lithuania | 0.2 |
| Croatia | 2.6 | Malta | 0.2 |
| Czech Republic | 0.5 | Netherlands | 37.4 |
| Denmark | 0.7 | Poland | 0.2 |
| Estonia | 0.2 | Portugal | 7.8 |
| Finland | 8.8 | Russia | 0.2 |
| France | 0.5 | Spain | 9.0 |
| Germany | 6.4 | Sweden | 1.4 |
| Greece | 0.2 | Switzerland | 2.1 |
| Hungary | 0.9 | Ukraine | 4.0 |
| Ireland | 0.5 | United Kingdom | 4.3 |
| Italy | 8.0 | Undeclared 31.2 | |

Results: Competences needed in practicing W&O Psychology

Table 1 presents the country share (in percentages) in the total number of participants, with the note that 119 (31 %) did not reported the country of origin. The sample is strongly dominated by the participants from the Netherlands (37.4%), followed by Spain, Finland, Italy, Portugal, Germany, United Kingdom and Ukraine.

The basic results concerning competences needed in practicing W&O Psychology are presented in Table 2. The table presents, for each of the 28 competences, the distribution of answers on the two questions: (1) Is this competence required in your job? (2) Is it required for practicing W&O Psychology in your country? The percentages were calculated for the whole sample (N=613). However, due to the missing data, the numbers of cases for specific competences are differing and much smaller.

Table 2. Competences: Rated importance in participant's job and in participant's country (%)

| Professional Competences | | Not really | Yes, desirable | Yes, essential | N |
|---------------------------------|---------|---------------|-------------------|-------------------|-----|
| 01 N4 | Job | 10.0 | 24.8 | 65.2 | 509 |
| 01. Needs analysis | Country | 4.4 | 37.4 | 58.2 | 505 |
| 02 Coal setting | Job | 6.3 | 26.5 | 67.2 | 509 |
| 02. Goal setting | Country | 3.6 | 48.5 | 47.9 | 505 |
| 02 Indicided account | Job | 10.5 | 24.7 | 64.8 | 494 |
| 03. Individual assessment | Country | 4.3 | 39.5 | 56.2 | 489 |
| 04 Crown aggaggment | Job | 20.4 | 38.3 | 41.3 | 494 |
| 04. Group assessment | Country | 9.6 | 53.6 | 36.8 | 489 |
| 05 Organizational aggregation | Job | 19.7 | 35.5 | 44.8 | 493 |
| 05. Organizational assessment | Country | 8.4 | 57.0 | 34.6 | 491 |
| Of Situational aggregation | Job | 33.9 | 35.4 | 30.7 | 492 |
| 06. Situational assessment | Country | 17.0 | 57.9 | 25.1 | 487 |
| 07. Product definition & | Job | 21.0 | 42.4 | 36.7 | 458 |
| requirements analysis | Country | 11.2 | 59.3 | 29.5 | 455 |
| 08 Carries or meduat design | Job | 20.6 | 39.8 | 39.6 | 457 |
| 08. Service or product design | Country | 12.7 | 63.2 | 24.1 | 456 |
| OO Compies on me dust testing | Job | 34.3 | 32.3 | 33.4 | 461 |
| 09. Service or product testing | Country | 22.3 | 58.3 | 19.4 | 458 |
| 10. Service or product | Job | 27.4 | 43.0 | 29.6 | 460 |
| evaluation | Country | 19.3 | 54.9 | 25.7 | 455 |
| 11 Intervention planning | Job | 22.0 | 31.8 | 46.2 | 446 |
| 11. Intervention planning | Country | 9.0 | 53.0 | 38.0 | 445 |
| 12. Direct person-oriented | Job | 19.5 | 30.5 | 50.0 | 446 |
| intervention | Country | 7.3 | 46.6 | 46.1 | 440 |
| 13. Direct context-oriented | Job | 26.1 | 42.1 | 31.8 | 444 |
| intervention | Country | 11.3 | 58.3 | 30.4 | 441 |
| 14. Indirect intervention | Job | 14.4 | 34.9 | 50.7 | 444 |
| competence | Country | 7.3 | 49.4 | 43.4 | 439 |
| 15. Service or product | Job | 40.9 | 36.0 | 23.1 | 445 |
| implementation | Country | 16.4 | 59.9 | 23.6 | 444 |
| 16. Evaluation planning | Job | 23.2 | 37.4 | 39.4 | 436 |
| 10. Evaluation planning | Country | 17.2 | 56.4 | 26.5 | 431 |
| 17. Evaluation measurement | Job | 25.9 | 39.0 | 35.1 | 433 |
| 17. Evaluation measurement | Country | 15.1 | 59.5 | 25.3 | 430 |
| 18. Evaluation analysis | Job | 21.4 | 39.6 | 38.9 | 434 |
| 16. Evaluation alialysis | Country | 15.2 | 54.8 | 30.1 | 429 |
| 19. Feedback-giving | Job | 6.2 | 19.1 | 74.7 | 434 |
| 19. reedback-giving | Country | 5.8 | 33.6 | 60.6 | 432 |
| 20. Report writing | Job | 5.3 | 18.5 | 76.2 | 432 |
| 20. Report writing | Country | 4.9 | 35.7 | 59.4 | 431 |

| Enabling | | Not really | Yes, desirable | Yes, essential | N |
|------------------------------|---------|---------------|-------------------|-------------------|-----|
| 21 Professional strategy | Job | 6.2 | 32.9 | 60.9 | 419 |
| 21. Professional strategy | Country | 8.8 | 48.8 | 42.4 | 410 |
| 22. Continuing professional | Job | 10.7 | 32.7 | 56.6 | 419 |
| development | Country | 10.1 | 46.3 | 43.6 | 415 |
| 23. Professional relations | Job | 5.5 | 34.4 | 60.1 | 419 |
| 23. I folessional relations | Country | 9.4 | 46.4 | 44.2 | 414 |
| 24. Research and development | Job | 5.5 | 34.4 | 60.1 | 419 |
| | Country | 9.4 | 46.4 | 44.2 | 414 |
| 25. Marketing and sales | Job | 17.0 | 38.5 | 44.5 | 418 |
| | Country | 18.3 | 56.9 | 24.8 | 415 |
| 26. Account management | Job | 28.8 | 40.3 | 30.9 | 417 |
| 20. Account management | Country | 24.3 | 56.6 | 19.0 | 415 |
| 27 Practice management | Job | 24.7 | 36.2 | 39.1 | 417 |
| 27. Practice management | Country | 23.1 | 51.2 | 25.7 | 412 |
| 20 Quality aggreens | Job | 31.7 | 42.3 | 26.0 | 416 |
| 28. Quality assurance | Country | 31.6 | 52.9 | 15.5 | 414 |

The data from Table 2 are also presented in figure 1 and figure 2, which graphically depict the distributions of answers. The figures contain two histograms, one showing the distribution of answers for the competences required in one job, and the other for the competences required in a country. (In calculating the means, the answers were coded as follows: not important =1; desirable =2; essential=3). Although there are some differences between the two diagrams that might be interesting for further exploration, here we concentrate on commonalities. The common feature of both histograms is that they reveal high importance ratings for all of the competences. As can be seen from the histograms the mean values are close to or above 2 ("yes, desirable"). The highest ratings were given to the following individual competences: Needs Analysis, Goals Setting, Individual Assessment, Feedback Giving, and Report Writing. Figure 2 depicts the distribution of answers averaged for the 6 professional competence categories plus enabling competence category. Thus, at the category level, Goal Specification competences and Communication competences are deemed most important.

Figure 1. Competences: Rated importance in participant's job and in participant's country

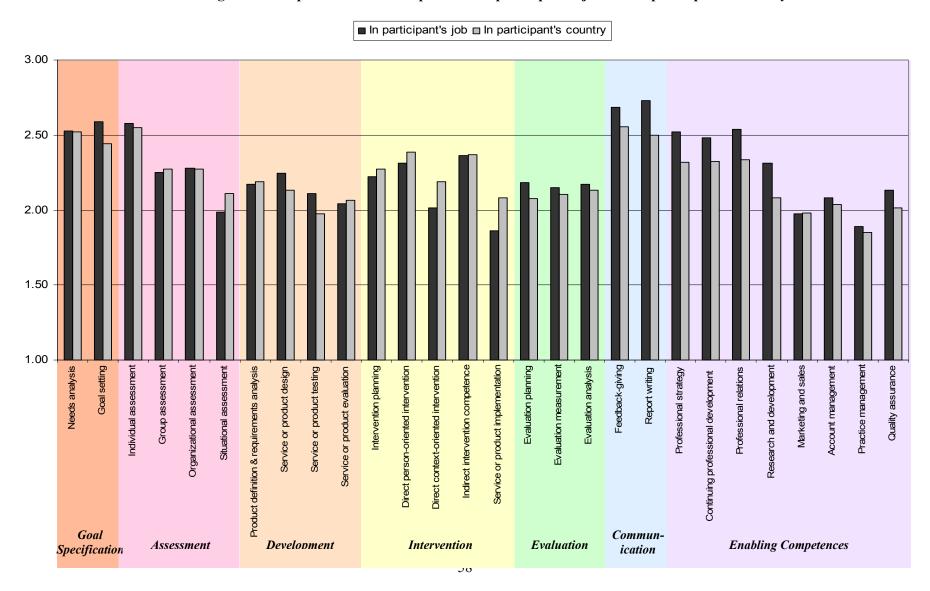
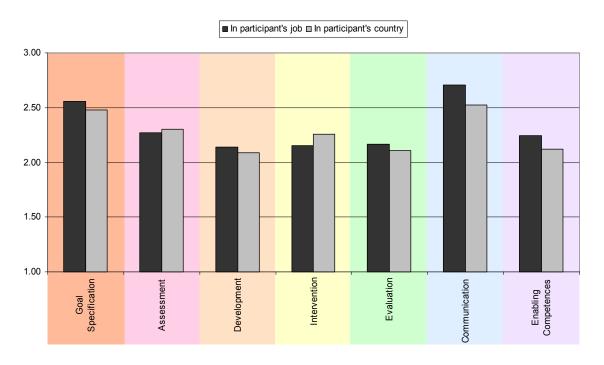


Figure 2. Competences: Rated importance in participant's job and in participant's country within each category of competences



Results: Exploring role and regional differences

By presenting the results for the whole sample, some possible group differences might remain hidden. For instance, there may be differences between respondents in different *job roles*, as captured by the Job Title. For example, W&O psychologists and consultants might have different views about competence requirements from educators and researchers. The numbers of respondents from these categories are: Consultant (N=162); Educator (N=67), Researcher (N=135) and Other (N=123).

Another source of differences may be the respondents' *national origin*. National differences should be, in particular, taken into account when a European system for competence assessment is being developed. However, due to large number of countries and relatively small number of participants who provided all needed data, we were unable to study the differences on the country level. We decided to study regional differences,

that is, to collapse the total sample into several meaningful groups with acceptable number of subjects. Five different clusters were performed considering regional similarities between participating countries: North European (NE): Denmark, Finland and Sweden (N=46); West European (WE) Belgium, Ireland, Netherlands and United Kingdom (N=185); Central European (CE): Austria, Germany and Switzerland (N=36); South European (SE): France, Greece, Italy, Malta, Portugal and Spain (N=108); East European (EE): Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Russia and the Ukraine (N=44).

In order to examine role and regional differences (Job Titles and Country Clusters) ANOVA analyses were conducted and in case of significant differences, the Tukey test for post-hoc analyses was performed. Results are shown in tables 3 and 4 (and figures 3 and 4) for Job Titles variable, and in tables 5 and 6 (and figures 5 and 6) for Country Clusters variable. Means with different letters in tables 3, 4, 5, and 6 differ at p<.05 according to the Tukey test. F-values are reported but in notes underneath the tables.

As for *role differences* and competence requirements in the respondents' own jobs (Table 3 and Figure 3), on the competences category level, we can see that in general researchers and educators consider *Development* and *Evaluation* competences more important than W&O psychologists and consultants. On the individual competence level, researchers put more emphasis than W&O psychologists and consultants on Service or Product Design, Service or Product Testing, Service or Product Evaluation, Evaluation Planning, Evaluation Measurement, and Evaluation Analysis. However, W&O psychologists and consultants put more emphasis than researchers on Clients Needs Analysis, Direct Personoriented Intervention, Indirect Intervention, Feedback Giving, and two enabling competences: Marketing and Sales, and Account Management. We can see that in relation to professional roles, the main differences exist between researchers on the one hand and W&O psychologists and consultants on the other hand, which indicates an expected difference between researchers and practitioners in some of the professional and enabling competences.

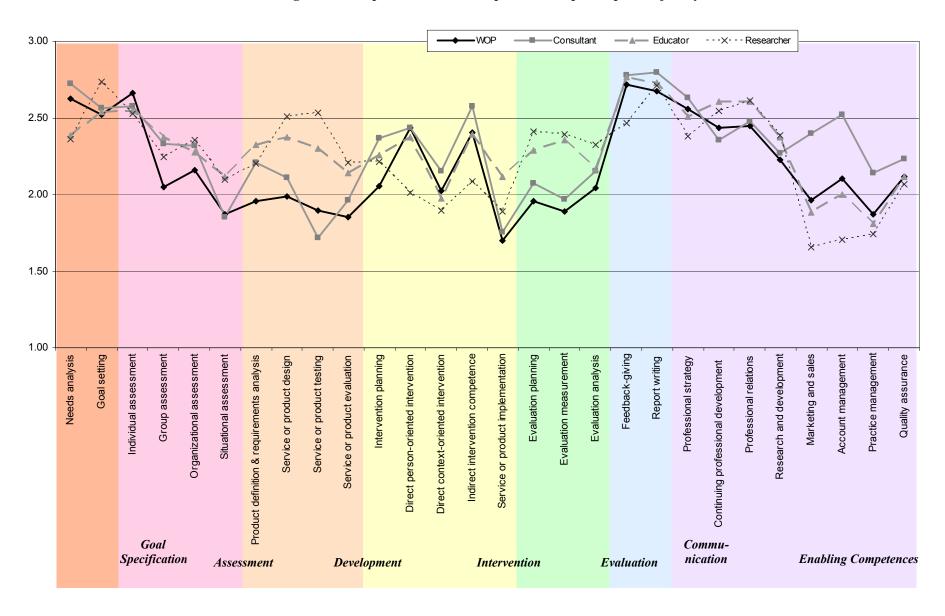
Table 3. Competences: Rated importance in participant's job by Job Title

| Professional Competences: | Job Title | | | | | | |
|--|-----------|------------|----------|------------|--|--|--|
| Importance 'in your job' | WOP | Consultant | Educator | Researcher | | | |
| 01.Needs analysis | 2.63bcd | 2.72cd | 2.38abc | 2.36ab | | | |
| 02.Goal setting | 2.52a | 2.56ab | 2.54ab | 2.73b | | | |
| 03.Individual assessment | 2.66 | 2.58 | 2.55 | 2.53 | | | |
| 04. Group assessment | 2.05a | 2.33b | 2.37b | 2.25ab | | | |
| 05. Organizational assessment | 2.16 | 2.32 | 2.27 | 2.36 | | | |
| 06. Situational assessment | 1.87 | 1.85 | 2.12 | 2.10 | | | |
| 07. Product definition & req's analysis | 1.96a | 2.21b | 2.33b | 2.20ab | | | |
| 08. Service or product design | 1.99ab | 2.11abc | 2.37bcd | 2.51cd | | | |
| 09. Service or product testing | 1.89a | 1.72a | 2.30b | 2.53b | | | |
| 10. Service or product evaluation | 1.85a | 1.96a | 2.14ab | 2.21b | | | |
| 11. Intervention planning | 2.06a | 2.37b | 2.26ab | 2.21ab | | | |
| 12. Direct person-oriented intervention | 2.44b | 2.44b | 2.37b | 2.01a | | | |
| 13. Direct context-oriented intervention | 2.02 | 2.15 | 1.98 | 1.90 | | | |
| 14. Indirect intervention competence | 2.40b | 2.58b | 2.40b | 2.08a | | | |
| 15. Service or product implementation | 1.70a | 1.75a | 2.12b | 1.89ab | | | |
| 16. Evaluation planning | 1.96a | 2.07a | 2.29ab | 2.41b | | | |
| 17. Evaluation measurement | 1.89ab | 1.97ab | 2.36cd | 2.39cd | | | |
| 18. Evaluation analysis | 2.05a | 2.15ab | 2.16ab | 2.33b | | | |
| 19. Feedback-giving | 2.72b | 2.78b | 2.77b | 2.47a | | | |
| 20. Report writing | 2.67 | 2.80 | 2.73 | 2.71 | | | |

| Enabling competences: | Job Title | | | | | |
|--------------------------------------|-----------|------------|----------|------------|--|--|
| Importance 'in your job' | WOP | Consultant | Educator | Researcher | | |
| 21. Professional strategy | 2.56ab | 2.63b | 2.51ab | 2.38a | | |
| 22. Contin. professional development | 2.44 | 2.35 | 2.60 | 2.54 | | |
| 23. Professional relations | 2.45 | 2.48 | 2.60 | 2.62 | | |
| 24. Research and development | 2.23 | 2.27 | 2.37 | 2.38 | | |
| 25. Marketing and sales | 1.96bc | 2.40d | 1.88abc | 1.66ab | | |
| 26. Account management | 2.11bc | 2.52d | 2.00abc | 1.71ab | | |
| 27. Practice management | 1.87a | 2.14b | 1.81a | 1.74a | | |
| 28. Quality assurance | 2.12 | 2.24 | 2.12 | 2.07 | | |

Notes: In calculating means the answers were coded as: not important = 1; desirable = 2; essential = 3. Means with different subscripts differ at p<.05 according to a Tukey test. F1 (3,409) = 7.932; F2 (3,409) = 2.757; F3 (3,395) = 0.819; F4 (3,395) = 3.513; F5 (3,394) = 1.392; F6 (3,393) = 3.061; F7 (3,364) = 3.467; F8 (3,362) = 10.477; F9 (3,365) = 27,210; F10 (3,364) = 4.545; F11 (3,352) = 2.849; F12 (3,352) = 7.692; F13 (3,351) = 2.161; F14 (3,350) = 9.751; F15 (3,351) = 3.458; F16 (3,344) = 6.452; F17 (3,341) = 10.099; F18 (3,342) = 2.228; F19 (3,343) = 5.800; F20 (3,341) = 0.996; F21 (3,334) = 2.912; F22 (3,335) = 2.099; F23 (3,334) = 1.621; F24 (3,333) = 0.893; F25 (3,332) = 19.224; F26 (3,332) = 22.387; F27 (3,331) = 5.774; F28 (3,333) = 1.010.

Figure 3. Competences: Rated importance in participant's job by Job Title



When assessing the importance of competences for the W&O psychologist profession (Table 4 and Figure 4), these differences between professional roles are less visible. In spite of these differences it should be noted that the four professional groups rated all of the competences as quite important. The lowest average ratings are around 2, which stands for "yes, desirable".

As for *regional differences*, in the rated importance of the competences in their own jobs (Table 5 and Figure 5) we can see that Goal *Specification* and *Communication* are the most important ones with averages rating between 2.5 and 3 which stand close to "yes, essential". On the individual competence level, the Northern and the Western regions put more emphasis in a number of competences than the Southern and the Eastern regions. The Northern region puts more emphasis than the Southern region on Situational Assessment, Service or Product Evaluation, and Evaluation Analysis competences, and more than the East on Service or Product Evaluation, Service or Product Implementation, Continuing Professional Development and Research and Development. The Western region put more emphasis than the Southern region on Situational Assessment, Service or Product Design, Service or Product Evaluation, and Intervention Planning.

When assessing the importance of competences in general (Table 6 and Figure 6), the differences between regions are less pronounced than in the case of the professional roles. In general, in spite of the differences in assessing the importance of some competences between the North and the South or Eastern regions and between the West and the South, it should be noted that the five regional groups have rated all of the competences as quite important. The lowest average ratings are around 2, which stands for "yes, desirable".

Table 4. Competences: Rated importance in participant's country by Job Title

| Professional Competences: | Job Title | | | | | | |
|--|-----------|----------------|---------|------------|--|--|--|
| Importance 'in your job' | WOP | Consultant WOP | | Researcher | | | |
| 01. Needs analysis | 2.57 | 2.56 | 2.38 | 2.57 | | | |
| 02. Goal setting | 2.46 | 2.35 | 2.50 | 2.46 | | | |
| 03. Individual assessment | 2.57ab | 2.40a | 2.59ab | 2.64b | | | |
| 04. Group assessment | 2.19 | 2.23 | 2.29 | 2.39 | | | |
| 05. Organizational assessment | 2.22 | 2.18 | 2.33 | 2.36 | | | |
| 06. Situational assessment | 1.98ab | 1.96ab | 2.27cd | 2.23cd | | | |
| 07. Product definition & req's analysis | 2.02a | 2.12a | 2.26ab | 2.35b | | | |
| 08. Service or product design | 2.01abc | 1.98ab | 2.26bcd | 2.28cd | | | |
| 09. Service or product testing | 1.93 | 1.93 | 1.98 | 2.05 | | | |
| 10. Service or product evaluation | 1.95 | 1.98 | 2.16 | 2.18 | | | |
| 11. Intervention planning | 2.17a | 2.21ab | 2.30ab | 2.41b | | | |
| 12. Direct person-oriented intervention | 2.41 | 2.38 | 2.35 | 2.40 | | | |
| 13. Direct context-oriented intervention | 2.07 | 2.13 | 2.28 | 2.27 | | | |
| 14. Indirect intervention competence | 2.36 | 2.34 | 2.38 | 2.40 | | | |
| 15. Service or product implementation | 1.92 | 2.04 | 2.21 | 2.16 | | | |
| 16. Evaluation planning | 1.93 | 2.08 | 2.14 | 2.16 | | | |
| 17. Evaluation measurement | 1.91a | 2.03ab | 2.26b | 2.22b | | | |
| 18. Evaluation analysis | 2.05 | 2.10 | 2.12 | 2.26 | | | |
| 19. Feedback-giving | 2.55 | 2.60 | 2.51 | 2.55 | | | |
| 20. Report writing | 2.57ab | 2.65b | 2.33a | 2.45ab | | | |

| Enabling competences: | Job Title | | | | | |
|--------------------------------------|-----------|----------------|-------|------------|--|--|
| Importance 'in your country' | WOP | Consultant WOP | | Researcher | | |
| 21. Professional strategy | 2.40 | 2.34 | 2.23 | 2.31 | | |
| 22. Contin. professional development | 2.33 | 2.30 | 2.37 | 2.29 | | |
| 23. Professional relations | 2.28 | 2.30 | 2.37 | 2.40 | | |
| 24. Research and development | 1.99 | 2.03 | 2.19 | 2.11 | | |
| 25. Marketing and sales | 1.80a | 1.88a | 2.26b | 1.99ab | | |
| 26. Account management | 1.89 | 2.03 | 2.17 | 2.06 | | |
| 27. Practice management | 1.77 | 1.72 | 1.98 | 1.93 | | |
| 28. Quality assurance | 1.96 | 1.97 | 2.09 | 2.04 | | |

Notes: In calculating means the answers were coded as: not important = 1; desirable = 2; essential = 3. Means with different subscripts differ at p<.05 according to a Tukey test. F1 (3,406) = 1.550; F2 (3,406) = 1.325; F3 (3,391) = 3.925; F4 (3,391) = 2.139; F5 (3,392) = 2.220; F6 (3,388) = 6.159; F7 (3,361) = 5.377; F8 (3,361) = 6.681; F9 (3,362) = 0.816; F10 (3,359) = 2.893; F11 (3,351) = 2.806; F12 (3,346) = 0.130; F13 (3,348) = 2.091; F14 (3,346) = 0.198; F15 (3,350) = 3.009; F16 (3,339) = 2.123; F17 (3,338) = 5.269; F18 (3,338) = 1.776; F19 (3,341) = 0.225; F20 (3,340) = 4.003; F21 (3,326) = 0.683; F22 (3,331) = 0.197; F23 (3,330) = 0.633; F24 (3,331) = 1.141; F25 (3,330) = 5.163; F26 (3,328) = 1.623; F27 (3,329) = 2.576; F28 (3,329) = 0.571.

Figure 4. Competences: Rated importance in participant's country by Job Title

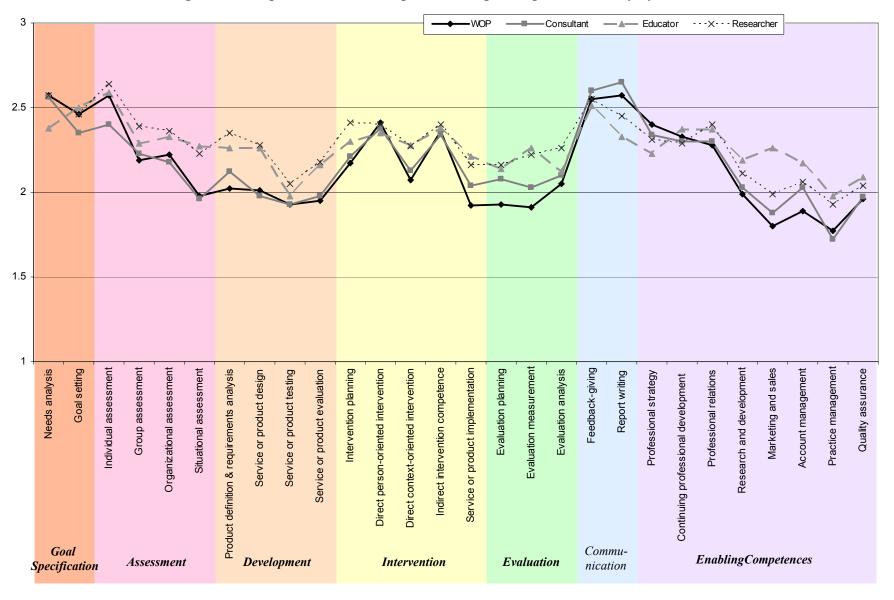


Table 5. Competences: Rated importance in participant's job by Country Cluster

| Professional Competences: | Country Cluster | | | | | |
|--|-----------------|----------|---------|-----------|---------|--|
| Importance 'in your job' | North | South | Central | East | West | |
| 01. Needs analysis | 2.67 | 2.54 | 2.56 | 2.56 | 2.65 | |
| 02. Goal setting | 2.54 | 2.64 | 2.83 | 2.65 | 2.63 | |
| 03. Individual assessment | 2.48 | 2.56 | 2.42 | 2.52 | 2.59 | |
| 04. Group assessment | 2.13ab | 2.42b | 1.92a | 2.36b | 2.20ab | |
| 05. Organizational assessment | 2.22 | 2.41 | 2.39 | 2.32 | 2.22 | |
| 06. Situational assessment | 1.85a | 2.21b | 2.08ab | 2.05ab | 1.83a | |
| 07. Product definition & req's | 2.11 | 2.29 | 2.11 | 2.23 | 2.12 | |
| 08. Service or product design | 2.40b | 2.35b | 2.40b | 2.25ab | 2.04a | |
| 09. Service or product testing | 1.87abc | 2.14cde | 2.51ed | 1.98abcd | 1.88abc | |
| 10. Service or product evaluation | 1.85a | 2.19b | 2.11ab | 2.25d | 1.91ac | |
| 11. Intervention planning | 2.22ab | 2.47b | 2.26ab | 2.27ab | 2.14a | |
| 12. Direct person-oriented intervention | 2.09 | 2.28 | 2.11 | 2.36 | 2.40 | |
| 13. Direct context-oriented intervention | 2.04 | 2.13 | 1.86 | 2.05 | 2.04 | |
| 14. Indirect intervention competence | 2.39 | 2.29 | 2.21 | 2.41 | 2.45 | |
| 15. Service or product implementation | 1.70ab | 1.97cde | 1.80cde | 2.09cde | 1.73ab | |
| 16. Evaluation planning | 2.02abcd | 2.35bcde | 2.54cde | 2.30bcde | 1.99ab | |
| 17. Evaluation measurement | 1.83abc | 2.29cde | 2.49cde | 2.20abcde | 1.95abc | |
| 18. Evaluation analysis | 1.93a | 2.30b | 2.40b | 2.27ab | 2.10ab | |
| 19. Feedback-giving | 2.70ab | 2.62ab | 2.49a | 2.66ab | 2.79b | |
| 20. Report writing | 2.67 | 2.71 | 2.66 | 2.66 | 2.76 | |

| Enabling competences: Importance 'in your job': | Country Cluster | | | | | |
|--|-----------------|--------|---------|--------|--------|--|
| | North | South | Central | East | West | |
| 21. Professional strategy | 2.50 | 2.48 | 2.63 | 2.51 | 2.59 | |
| 22. Continuing professional development | 2.31a | 2.50ab | 2.55ab | 2.73b | 2.36a | |
| 23. Professional relations | 2.53 | 2.56 | 2.77 | 2.47 | 2.51 | |
| 24. Research and development | 2.09a | 2.36ab | 2.42ab | 2.50b | 2.19ab | |
| 25. Marketing and sales | 2.11 | 1.93 | 1.76 | 1.98 | 2.11 | |
| 26. Account management | 2.09ab | 2.00a | 1.82a | 2.16ab | 2.29b | |
| 27. Practice management | 1.70 | 1.99 | 1.91 | 1.89 | 1.99 | |
| 28. Quality assurance | 2.02 | 2.32 | 2.12 | 2.14 | 2.16 | |

Notes: In calculating means the answers were coded as: not important = 1; desirable = 2; essential = 3. Means with different subscripts differ at p<.05 according to a Tukey test. F1 (4,411) = 0.724; F2 (4,410) = 1.306; F3 (4,411) = 0.659; F4 (4,411) = 3.895; F5 (4,412) = 1.424; F6 (4,412) = 4.517; F7 (4,408) = 1.093; F8 (4,408) = 4.805; F9 (4,412) = 5.808; F10 (4,411) = 4.303; F11 (4,411) = 3.037; F12 (4,412) = 2.220; F13 (4,410) = 0.860; F14 (4,410) = 1.355 F15 (4,411) = 3.307; F16 (4,410) = 6.985; F17 (4,408) = 7.543; F18 (4,409) = 3.296; F19 (4,410) = 2.890; F20 (4,408) = 0.601; F21 (4,408) = 0.862; F22 (4,408) = 4.122; F23 (4,408) = 1.605; F24 (4,407) = 3.080; F25 (4,406) = 2.170; F26 (4,406) = 3.965; F27 (4,405) = 1.432; F28 (4,407) = 1.717.

Figure 5. Competences: Rated importance in participant's job by Country Cluster

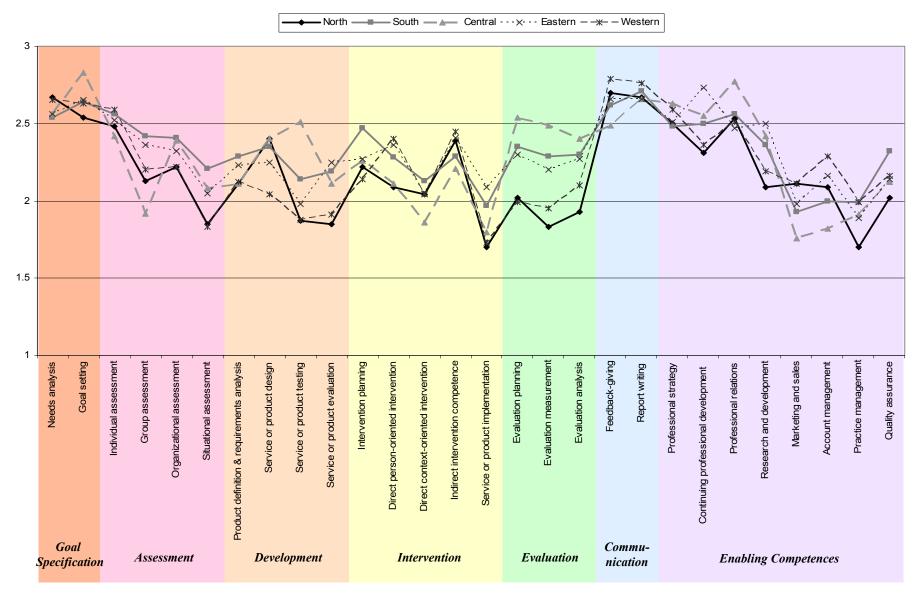


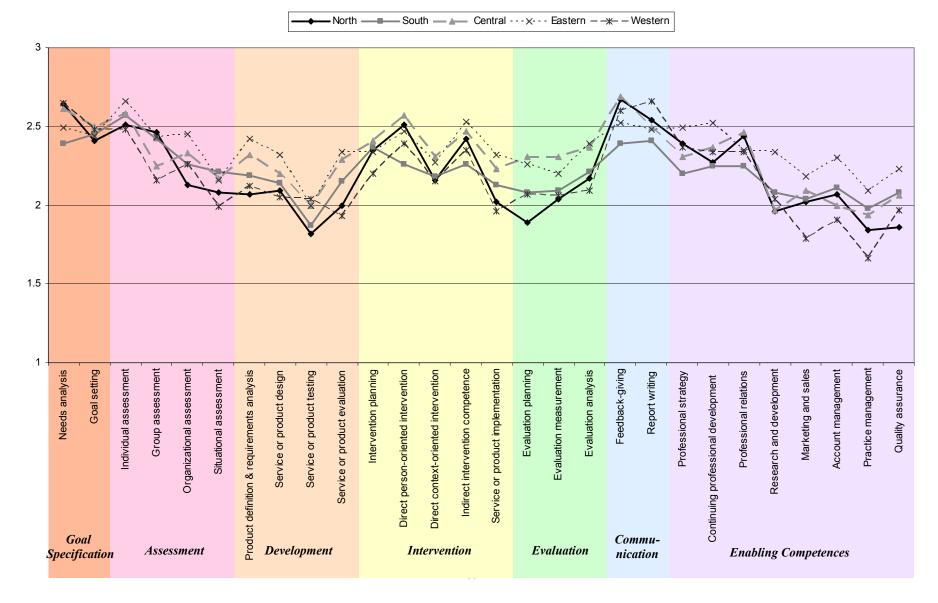
Table 6. Competences: Rated importance in participant's country by Country Cluster

| Professional Competences: | Country Cluster | | | | | |
|--|-----------------|--------|---------|--------|--------|--|
| Importance 'in your country' | North | South | Central | East | West | |
| 01. Needs analysis | 2.64b | 2.39a | 2.61ab | 2.49ab | 2.65b | |
| 02. Goal setting | 2.41 | 2.45 | 2.50 | 2.44 | 2.48 | |
| 03. Individual assessment | 2.51 | 2.57 | 2.58 | 2.66 | 2.48 | |
| 04. Group assessment | 2.46b | 2.42b | 2.25ab | 2.43b | 2.16a | |
| 05. Organizational assessment | 2.13 | 2.26 | 2.33 | 2.45 | 2.26 | |
| 06. Situational assessment | 2.08ab | 2.21b | 2.17ab | 2.16ab | 1.99a | |
| 07. Product definition & req's analysis | 2.07a | 2.19ab | 2.32ab | 2.42b | 2.12a | |
| 08. Service or product design | 2.09ab | 2.14ab | 2.20ab | 2.32b | 2.05a | |
| 09. Service or product testing | 1.82 | 1.87 | 2.00 | 2.00 | 2.04 | |
| 10. Service or product evaluation | 2.00ab | 2.15b | 2.29b | 2.34b | 1.93a | |
| 11. Intervention planning | 2.35 | 2.37 | 2.41 | 2.34 | 2.20 | |
| 12. Direct person-oriented intervention | 2.51 | 2.26 | 2.57 | 2.47 | 2.39 | |
| 13. Direct context-oriented intervention | 2.16 | 2.18 | 2.31 | 2.27 | 2.15 | |
| 14. Indirect intervention competence | 2.42 | 2.26 | 2.47 | 2.53 | 2.35 | |
| 15. Service or product implementation | 2.02ab | 2.13ab | 2.23ab | 2.32b | 1.96a | |
| 16. Evaluation planning | 1.89a | 2.08ab | 2.31b | 2.26b | 2.07ab | |
| 17. Evaluation measurement | 2.04 | 2.09 | 2.31 | 2.20 | 2.06 | |
| 18. Evaluation analysis | 2.17ab | 2.21ab | 2.37ab | 2.39b | 2.09a | |
| 19. Feedback-giving | 2.67b | 2.39a | 2.69b | 2.52ab | 2.60b | |
| 20. Report writing | 2.54ab | 2.41a | 2.49ab | 2.48ab | 2.66b | |

| Enabling competences: Importance 'in your country' | Country Cluster | | | | | |
|---|-----------------|--------|---------|---------|---------|--|
| | North | South | Central | Eastern | Western | |
| 21. Professional strategy | 2.39 | 2.20 | 2.31 | 2.49 | 2.37 | |
| 22. Contin. professional development | 2.27 | 2.25 | 2.37 | 2.52 | 2.34 | |
| 23. Professional relations | 2.44 | 2.25 | 2.46 | 2.35 | 2.34 | |
| 24. Research and development | 1.96a | 2.08ab | 1.97ab | 2.34b | 2.04a | |
| 25. Marketing and sales | 2.02 | 2.04 | 2.09 | 2.18 | 1.79 | |
| 26. Account management | 2.07ab | 2.11ab | 2.00ab | 2.30b | 1.91a | |
| 27. Practice management | 1.84ab | 1.98b | 1.94ab | 2.09b | 1.66a | |
| 28. Quality assurance | 1.86 | 2.08 | 2.06 | 2.23 | 1.97 | |

Notes: In calculating means the answers were coded as: not important = 1; desirable = 2; essential = 3. Means with different subscripts differ at p<.05 according to a Tukey test. F1 (4,408) = 4.225; F2 (4,409) = 0.192; F3 (4,408) = 1.205; F4 (4,409) = 4.826; F5 (4,410) = 1.785; F6 (4,408) = 2.485; F7 (4,405) = 3.025; F8 (4,407) = 2.281; F9 (4,409) = 1.947; F10 (4,407) = 5.545; F11 (4,410) = 1.977; F12 (4,407) = 2.424; F13 (4,407) = 0.737; F14 (4,405) = 2.048; F15 (4,410) = 4.005; F16 (4,406) = 2.907; F17 (4,405) = 1.626; F18 (4,405) = 3.217; F19 (4,408) = 3.189; F20 (4,407) = 3.458; F21 (4,399) = 2.070; F22 (4,404) = 1.465; F23 (4,403) = 1.091; F24 (4,404) = 2.570; F25 (4,404) = 5.192; F26 (4,402) = 3.414; F27 (4,403) = 6.490; F28 (4,402) = 2.172.

Figure 6. Competences: Rated importance in participant's country by Country Cluster



Results: Competences for the future

The version of the survey that was used in the second administration contained two open questions to assess the expectations of European W&O psychologists regarding the competences needed in the future. The two questions were:

- 1. What are the most important competences required for W&O psychologists in the near future? (name three)
- 2. Are there other enabling competences required for W&O psychologists in the near future?

Only a small number of answers were received. For a summary of the results we refer to Annex B.

Discussion

It is interesting to note that there is a general difference between the competences as required in the respondents' own job and the competences that are generally required in the country. With few exceptions the requirements in the own job are higher than those in the country. The contrasts are most clearly visible in "yes, essential" ratings. This may perhaps be interpreted as an indicator of professional change over time, where the perceived professional standard is lagging behind actual practice. The differences seem to be largest in goal setting, organizational assessment, service / product design and testing, and in the competences related to evaluation and communication. They are also present in the enabling competences.

The relative emphasis placed on the professional competences differs in an expected manner with the professional role. The practitioners –W&O psychologists and Consultants– assign great importance to need analysis and goal setting, and to direct person-oriented intervention and indirect intervention (cf. coaching). The researchers and educators put greater emphasis

on evaluation competences and on the "new" competences of service / product design. Since they are working on the side of innovation and have a great influence on the education of generations of psychologists this emphasis may become more visible at the practitioners' side in the future as well. Indicators of future changes in the profession may also be found in the ratings of the enabling competences. Here, the greater emphasis of practitioners on business related competences, i.e. professional strategy, marketing-sales and account management are noteworthy.

Given the limitations of the data it is hard to interpret regional differences. However, there is some evidence that the respondents from the Western area put lower emphasis on service / product design. Together with respondents from the Northern area they also put less emphasis on service / product testing an evaluation and on evaluation competences as compared to respondents from the other areas. Whether this indicates diverging trends in professional development in Europe will have to be established in future research.

In spite of these differences the data presented in this report show that there is a substantial agreement among psychologists about the professional and enabling competences that are needed to exercise the profession of W&O psychologist. If one would take as a norm the ratings that respondents have given about the competences required in their own work, it is clear that all competences included in the survey are very important. The ratings about what is generally required in the country are less high, but still give convincing support to the idea that a European W&O Psychologist needs all of the competences listed.

Conclusion

The main conclusion from the assessment of the importance of the 20 professional and 8 enabling competences is that all types of competences are seen as relevant and important for the work of W&O psychologists. The highest ratings were given to the following competences: Need Analysis, Goals Setting, Individual Assessment, Feedback Giving, and Report Writing, which somehow can be considered as the original core of the profession.

Some difference between researchers and practitioners (W&O psychologists and consultants) has been observed, in particular with regard to the competences required in their own job. However, all of the professional groups gave relatively high average ratings to all the competences indicating that every competence was considered at least "desirable". The high average ratings for all of the competences are similar when regional clusters are analyzed. This suggests that that the whole system of 28 competences could be adopted for the purpose of assessing minimum requirements for practicing W&O psychology in Europe.

Annex A

Definition of competences

| Primary competences | Description |
|---|--|
| A. Goal specification | Interacting with the client for the purpose of defining the goals of the service that will be provided |
| 1. Needs analysis | Gathering information about the client's needs by means of appropriate methods, clarifying and analyzing the needs to a point where meaningful further action can be taken. |
| 2. Goal setting | Proposing and negotiating goals with the client, establishing acceptable and feasible goals, and specifying criteria for evaluating goal fulfillment at a later time. |
| B. Assessment | Establishing relevant characteristics of individuals, groups, organizations, and situations by means of appropriate methods |
| 3. Individual assessment | Carrying out assessment by means of interviewing, testing and observation of individuals in a setting relevant for the service demanded. |
| 4. Group assessment | Carrying out assessment by means of interviewing, testing and observation of groups in a setting relevant for the service demanded. |
| 5. Organizational assessment | Carrying out assessment by means of interviews, surveys, and other methods and techniques which are appropriate for studying organizations in a setting that is relevant for the service demanded. |
| 6. Situational assessment | Carrying out assessment by means of interviews, surveys, and other methods and techniques which are appropriate for studying situations in a setting that is relevant for the service demanded. |
| C. Development | Developing services or products on the basis of psychological theory and methods for the use by the clients or psychologists. |
| Service or product definition & requirements analysis | Defining the purpose of the service or product, identifying relevant stakeholders, analyzing requirements and constraints, and drawing up specifications for the product or service or service, taking into consideration the setting in which the service or product is to be used. |
| 8. Service or product design | Designing or adapting services or product in accordance with the requirements and constraints, taking into consideration the setting in which the service or product is to be used. |
| Service or product testing | Testing the service or product and assessing its feasibility, reliability, validity and other characteristics, taking into consideration the setting in which the service or product is to be used. |
| 10. Service or product evaluation | Evaluating the service or product with respect to utility, client satisfaction, user friendliness, costs and other aspects which are relevant in the setting in which the service or product is to be used. |

| Primary competences | Description |
|---------------------------|---|
| D. Intervention | Identifying, preparing and carrying out interventions which are appropriate for reaching the set goals, using the results of assessment and development activities. |
| 11.Intervention | Developing an intervention plan that is appropriate for reaching the |
| planning | set goals in a setting relevant for the service demanded. |
| 12. Direct person- | Applying intervention methods that directly affect one or more |
| oriented | individuals in accordance with the intervention plan, in a setting |
| intervention | relevant for the service demanded. |
| 13. Direct situation- | Applying intervention methods that directly affect selected aspects of |
| oriented | the situation in accordance with the intervention plan, in a setting |
| intervention | relevant for the service demanded. |
| 14. Indirect intervention | Applying intervention methods that enable individuals, groups or |
| | organizations to learn and take decisions in their own interest, in a |
| | setting relevant for the service demanded. |
| 15. Service or product | Introducing services or products and promoting their proper use by |
| implementation | clients or other psychologists. |
| | Establishing the adequacy of interventions in terms of adherence to |
| E. Evaluation | the intervention plan and the achievement of set goals. |
| 16.Evaluation planning | Designing a plan for the evaluation of an intervention, including |
| | criteria derived from the intervention plan and the set goals, in a |
| | setting relevant for the service demanded. |
| 17.Evaluation | Selecting and applying measurement techniques that are appropriate |
| measurement | for effectuating the evaluation plan, in a setting relevant for the |
| | service demanded. |
| 18.Evaluation analysis | Conducting analyses in accordance with the evaluation plan, and |
| | drawing conclusions on the effectiveness of interventions in a setting |
| | relevant for the service demanded. |
| | Providing information to clients in a way that is adequate to fulfill the |
| F. Communication | clients' needs and expectations. |
| 19.Giving feedback | Providing feedback to clients, using appropriate oral and/or audio- |
| | visual means, in a setting relevant for the service demanded. |
| 20.Report writing | Writing reports as to inform clients about the results of assessment, |
| | service or product development, interventions, and/or evaluations, in |
| | a setting relevant for the service demanded. |

| Enabling competences | Description |
|-------------------------------------|--|
| 1. Professional strategy | Choosing an appropriate strategy for dealing with the problem(s) posed, based on a reflection on the professional situation and one's own primary competences. |
| Continuing professional development | Updating and developing one's primary and enabling competences, knowledge and skills in accordance with changes in the field and the standards and requirements of the psychological profession, national and European regulations. |
| 3. Professional relations | Establishing and maintaining relationships with other professionals, as well as relevant organizations. |
| 4. Research and development | Developing new products and services that have the potential of fulfilling current or future clients' needs and generating new business. |
| 5. Marketing & sales | Bringing current and new products and services to the attention of actual or potential clients, contacting clients, making business offers, selling services, providing after-sales services. |
| 6. Account management | Establishing and maintaining relationships with (potential) clients, monitoring clients' needs and satisfactions, identifying opportunities for expanding business. |
| 7. Practice management | Designing and managing the practice from which services are rendered, whether as a small business or as part of a larger private or public organization, including financial, personnel, and operational aspects, providing leadership to employees. |
| 8. Quality assurance | Establishing and maintaining a system for quality assurance for the practice as a whole. |

Note. For the detailed description of the competences used as the basis for the survey, see Appendix 3 to the report 'EuroPsy and the Advanced Certificate in W&O psychology', February, 2008.

REFERENCES

- Bartram, D., & Roe, R. A. (2005). Definition and Assessment of Competences in the Context of the European Diploma in Psychology. *European Psychologist*, 10(2), 93-102.
- Bartram, D., & Roe, R. A. (2008). Individual and organisational factors in competence acquisition. In W. J. Nijhoff, R. J. Simons & A. F. Nieuwenhuis (Eds.), *The learning potential of the workplace*. Rotterdam: Sense Publishers.
- Roe, R. A. (2002). What makes a competent psychologist? *European Psychologist*, 7(3), 192-202.

Annex B

Future Competences in W&O Psychology 2007

1. Introduction

Future competences needed by European W&O psychologists were studied with two additional data sets collected in 2007. The first data is from a group work session held at the XIII European Congress of Work and Organizational Psychology, the 10th May 2007 in Stockholm. In addition to this, two open-ended questions were added to the second version of the European Survey on W&O competencies that was released in Summer 2007.

2. Method and data

Group work on future competences

After a short introduction why to study competences in work and organizational psychology, the 30 participants of the session, mostly W&O professors, were asked to discuss with a person next to him or her and answer the question: "What kind of urgent and emerging future changes you see in your working environment to happen and how will they affect the competences that W&O psychologists need to have in future. What are the main current and future changes in W&O psychology concerning: (1) Working contexts (e.g. globalization), (2) Perspectives (e.g. multidisciplinarity), (3) Subjects (e.g. self-leadership), (4) Theories (e.g. collective regulation), (5) Assessments (e.g. using ICT), (6) Interventions (e.g. confronting) and (7) Clients (e.g. multi-cultural clients)". In all, fifteen answers from as many pairs of people were received.

Two open-ended questions in the survey

Two open questions were installed in the second version of the European survey in order to get a hint of general opinion among European W&O psychologists concerning future competences. The two questions were:

- 1. What are the most important competences required for W&O psychologists in the near future? (name three)
- 2. Are there other enabling competences required for W&O psychologists in the near future?

In all, 46 respondents (Portugal = 19, Ukraine = 17, Spain = 4, Switzerland = 3, Greece = 1, Lithuania = 1, Belgium = 1, UK = 1, Malta = 1, Hungary = 1, Finland = 1, Sweden = 1) answered the first question, and 19 to the second question.

Data analysis

All the answers of the group work were first arranged into seven categories described above. Then they were ranked.

The open-ended survey answers were categorized into the professional competences described in the survey and into one additional category. Enabling competences were categorized based on the given eight categories.

3. Results

3.1 Future challenges in working environment

A variety of future changes influencing future competences were named:

- (1) **Working contexts**. There will be changes in demography as the workforce is getting older and becoming multi-cultural. Globalization will increase the needs to understand other cultures. The role of public sector and small companies will change. There will be also changes in the adaptation and use of technologies. All these changes result in increasing needs to understand complexity and manage change.
- (2) **Perspectives**. There is a clear need to develop collaboration with other professions and disciplines. It is clearly shown that multiple perspectives and approaches are needed in the future to understand working life as a system. The need to bring working life closer to basic education was also emphasized.
- (3) **Subject matters**. Integration of western and eastern approaches in W&O psychology and understanding diversity and inter-cultural differences and identity were mentioned. Improving employability (as less and less job security is offered) and developing competences and knowledge were emphasized. Quality of working life, occupational mental health, aging and aging population were seen as challenges, as well as new types of organizations. The future of evidence-based management was considered promising.
- (4) **Theories**. Commitment, psychological contracts, and social responsibility of companies were seen as important theoretical topics. A more integrated motivation theory and a stronger role of neuroscience were also expected. Theories to understand collective regulation and collective emotions were looked for, as well as theories of work organizations bridging the gap between

individual and organization, and theories about understanding conflicts and co-operation in organizations.

- (5) **Assessments**. There was agreement about a strong role of technologies in future assessments in future was agreed, and all kinds of new tools, techniques and services were expected. Training and education, multi-/cross-cultural topics and group processes were mentioned as future targets of assessments and interventions. Qualitative research, longitudinal and time perspectives, multi-level analysis, more standardization uniformity and more details in assessments were considered important in research.
- (6) **Interventions**. Policy-level interventions, more specific assessment and services for different groups, organizational transformation techniques, and participation were mentioned as types of future interventions. Organizational climate, balance between work and people, conflicts, sense-making, multi-cultural issues, aging population and workforce, and quality improvements were mentioned as targets of interventions. Competences to have an impact on political choices and strategies as well as to prove the effectiveness of interventions were also looked for.
- (7) **Clients**. Aging population and multicultural workforce, politicians and society, non-profit organizations, and families were seen as future clients. Clients were also considered to be more informed and more involved in research activities. In all, managing diversity and cooperation are needed in the future,

3.2 Future professional and enabling competences

As there were only 46 responses to the in open-ended survey questions concerning professional competences for the future, only weak conclusions can be drawn. The need for intervention competences were rated highest when the responses were categorized into the six competence areas: Goal specification (n=13), Assessment (n=15), Development (n=9), Intervention (n=20), Evaluation (n=7) and Communication (n=13). In addition, dozens tens of individual traits and skills were mentioned such as like adaptability, sensibility, creativity and critical thinking and interpersonal relationship skills. From the eight secondary or enabling competences the marketing & sales and quality assurance competences were underlined as well as the need for communication competences and professional ethics.

Appendix 5. Professional Coaching

Coaching is seen as an indispensable part of the professional development of the W&O psychologist. W&O psychologists who intend to obtain the Advanced Certificate will have to arrange for coaching by a colleague in the field of W&O psychology, who has been acknowledged to be competent to perform this role.

The main functions coaching are: to help the W&O-psychologists to monitor and reflect upon their own professional behavior with the purpose of further learning and enhancing the quality of professional practice. Coaching has a dual focus:

- 1) it is directed at the professional behavior of the W&O psychologists vis-à-vis clients, candidates, and others who can be considered as stakeholders in the social system to which they are offering their services; this includes the way of attending to client's needs and of handling of conflicting interests, while following scientific principles and observing ethical principles; it aims to promote the development of professional competences;
- 2) it is directed at generic professional behaviors related to the management and development of the psychologists' professional practice, including continuous professional development; thus, it aims at promoting the development of enabling competences.

In order to have the purported effect, the coaching shall take place regularly, with a sufficient depth and duration. It is recommend that the details shall are laid down in a coaching contract before the coaching period starts. As for frequency and duration a minimum of 1 hour per 2 weeks is required.

Although coaching can pertain to any aspect of the W&O psychologists work, it is recommended that explicit attention is given to competence development. Tot this purpose, using a Competence Development Scheme, as mentioned in section 4.2, can be helpful. Keeping a record of the content of coaching is also recommended. The content can comprise any issue of significance for professional development, but progress made with regard to competence development should explicitly be covered. Here, the Competence Development Record might be used.

At the end of the coaching period the coach is expected to make an assessment of the competences of the W&O psychologist, that will have to be submitted as part if the application. See Appendix 3 for information about competence assessment.

These recommendations are provisional. It is foreseen that experiences with varying coaching practices in different parts of Europe will help to develop more definitive guidelines in the future.

Appendix 6. Documenting Work Experience (structured CV)

To facilitate the evaluate psychologists' work experience it is important to develop a structured format for describing the work roles that have been fulfilled and the activities that have been performed.

The description should be anti-chronological – from most recent to least recent – and comprise the following categories.

- 1. Years/months during which a particular work role has been fulfilled.
- 2. Name of description of the work role
- 3. Organization where the role has been carried out
- 4. Responsibilities associated with the role
- 5. Activities performed as part of the role, differentiated according to
 - type of client
 - type of other professional
- 6. Results of the activities
 - types of results
 - specific achievements
- 7. Related learning achievements
 - Opportunities for learning
 - Competences that have been (further) developed

It is recommended that the structured CV is accompanied by a Portfolio with documents that give supportive evidence, in particular regarding points 6 and 7.

Appendix 7. Continuing Professional Development (CPD)

All W&O psychologists are expected to maintain and further develop their level of professional competences. For holders of the Advanced European Certificate in W&O Psychology this is a formal requirement, just as in the EuroPsy system. This means that a certain amount and type of professional work must be done and that certain developmental activities must be undertaken on a continuing basis. Also evidence must be gathered to prove relevant work experience and personal professional development at the moment of applying for an extension of the validity of the certificate.

In several European countries a local CPD system is in place. Where no such system exists, the following guidelines are provided for use by National Awarding Committees (NACs). The guidelines for the Advanced European Certificate in W&O Psychology are structurally the same as for the European Certificate in Psychology. Of course, the specific requirements differ with the level of the certificate and the field of work.

Work experience

The applicant should show evidence of professional work as a qualified W&O psychologist for 400 or more hours per year. The number of working hours can be averaged over a period of several years when applying for an extension of the validity of the Certificate. The average should be higher than 400 over not less than 4 years within the last 6 years before the application for the extension. Acceptable evidence includes, for example: employment contracts accompanied by a job description, project contracts, or statements of income for tax authorities (in the case of psychologists in independent practice.)

Personal professional development

It is a responsibility of the W&O psychologist to keep informed about recent professional and scientific developments in W&O psychology and adjacent fields. A minimum of 80 hours per year is recommended and explicit evidence of 40 hours continuing professional development per year should be provided at the moment of application.

There is a wide range of different *types of professional development activities*, and the following list is not exhaustive. For each type of activity an approximate minimum and/or maximum of the percentage of time that can be accredited has been indicated, in order to ensure that psychologists undertake a range of different activities as part of their CPD.

- Certified attendance and participation in accredited courses and/or workshops aimed at further professional development (15-60%).
- Development of specific new skills through practice at work (15-40%)
- Certified attendance in intervision (mutual supervision by peers) meetings (10%-20%)
- Certified attendance at a professional or scientific conference (10-20%)

- (Co-)authoring and/or editing of publications on research and/or professional issues (max 30%).
- Presentations to professional audiences (max 20%).
- Editorial work on journals and books in psychology (max 20%)
- For the purpose of accreditation the sum of the final three categories above cannot exceed 60%.

Record keeping

The holder of the Advanced European Certificate in W&O Psychology is required to maintain a record of his or her Continuing Professional Development. In addition to recording the acquisition of experience of practice in the context of new functions, client groups and settings, this should cover training and development from continuing education. This record, with supporting evidence, will provide the basis for extension of the validity of the certificate.