Erasmus+ Project

Developing Professional Qualifications and Training

for European Behaviour Analysts

http://euroba.org/

Intellectual Output 4: EuroBA-Technician competences

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Project summary

This project is the result of cooperation between international partners from the United Kingdom, Czech Republic, Netherlands, Ireland, Greece, Sweden, and Italy. The project benefitted from a Professional Advisory Group (PAG) that included a further 16 European countries to ensure that the standards and competences developed in the project are acceptable to as many European countries as possible.

The overall objectives of the project were to facilitate transparency and recognition of qualifications for behaviour analysts in Europe. The profession of behaviour analyst started in the early 1970s in North America (Carr, 2011; Hughes & Shook, 2007). However, it is not formally recognised in the European Union (EU). For behaviour analysts to be able to practice within the EU with the same expectations surrounding knowledge, skills, and autonomy and responsibilities, it is necessary to create a clear range of competences for the profession.

The project has 6 Intellectual Outputs (IO). IO1 covers professional standards referenced to European Qualifications Framework (EQF). IO2 outlines the development of the behaviour analyst qualification in the context of the six partner National Qualifications Frameworks (NQF). IO3 provides a detailed glossary of terms in partner languages. IO4 outlines a competency framework for entry-level EuroBA-Technicians (EuroBA-T). IO5 is a competency framework for Master's-level EuroBA (EuroBA-M). IO6 is an online entry-level multimedia course in six partner languages.

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Introduction

Behaviour Analysis (BA) is a natural science with a rich set of complex, well-established, evidence-supported psychological principles (i.e., principles of behaviour) (Skinner, 1938). The science and practice of behaviour analysis is approximately 100 years old. As with other natural sciences, BA has evolved through the accumulation of empirically-based interventions in multiple areas of practice. The applied branch, Applied Behaviour Analysis (ABA), provides interventions in many different areas, such as clinical, educational, developmental, and organisational fields (Cooper, Heron, & Heward, 2020; Heward, Critchfield, Reed, Detrich, & Kimball, 2022).

Many behaviour analytic principles can be taught to and implemented by different professionals, e.g., teachers, social workers, nurses, and psychologists. What is missing in the European Union (EU), though, is a profile of a professional who is specifically trained and licensed (or certified – the terminology depends on the legal system of each country) to deliver interventions defined from a scientific and ethical viewpoint as ABA-based interventions.

These interventions can be delivered at multiple levels of practice. These different levels allow individuals to practice the science according to specific guidelines at various points in their career. The initial entry-level of training for behaviour analysts, is often referred to as a behaviour technician, behaviour analysis technician, or ABA technician. Behaviour technicians are auxiliary workers whose role it is to carry out the programming developed by senior behaviour analysts who have more detailed training and greater expertise. The present document outlines the proposed minimum competence requirements for the **European Behaviour Analyst - Technician (EuroBA-T).**

The EuroBA-T competences presented here are considered minimum standards of academic training and practice for professionals who deliver direct behaviour analytic services to clients and key stakeholders, irrespective of the area of practice (e.g., education, intellectual disabilities, autism, community work, social care) and irrespective of the age group of service users (e.g., children, youth, or adults). The competences described here provide a basis for the recognition of the profession of EuroBA-T within Europe, thereby facilitating mobility between countries.

Background to EuroBA-T competence development

The EuroBA-T competences identify the knowledge, skills, responsibilities, and autonomy that are expected of a qualified EuroBA-T professional. The competences listed here were developed by the EuroBA project team that included behaviour analysts from 6 European countries. The competences also were reviewed by the members of the Professional Advisory Group (PAG). PAG includes 16 European countries in addition to the 6 countries represented by the EuroBA project partners. Consequently, these competences have been reviewed and

approved by behaviour analysts and relevant organisations in 22 European countries for setting the standards for EuroBA-T training.

It is important to see these competences in context. As of 2023, there is no co-ordinated or appoved professional regulation for behaviour analysts across Europe, while at the same time, there is a clear shortage of well-trained behaviour analysts. In particular, parents of children with disabilities complain about ill-trained staff and low-quality care settings. With no professional regulation, there have been complaints about malpractice in the name of ABA. Therefore, professional regulation, registration, or certification is vitally important to ensure the quality of services and to protect the welfare of those supported by ABA-based interventions.

IO4 focuses on developing standards for a new pathway for entry level training in behaviour analysis (EuroBA-T) and puts into practice the European Disability Strategy 2010–2020 (European Commission, 2010) to empower people with disabilities so that they can enjoy the benefit of full participation in society and in the European economy. The aim is to eliminate existing barriers that arise from a lack of appropriate professional qualifications. As such, the list of competences presented here contributes significantly to addressing areas for action identified by the European Commission, including accessibility, participation, equality, employment, education and training, and social protection.

Some behaviour technicians have gained certification through the USA-based Behavior Analyst Certification Board (BACB, 2022). This means that they have become Registered Behavior Technicians (RBT®). RBT training is based on technician-level training and extensive supervised practice as well as a 'registration exam' that is set by the BACB. Some European Universities and other organisations have developed RBT courses. However, these courses do not lead to professionally recognised qualifications in the EU. That is the case because the BACB registration is only recognised in the USA/Canada. It is not recognised professionally in any EU country.

Accordingly, the new competence profile developed in IO4 is necessary to set the standards and identify the competences for technician-level behaviour analysts in the EU. The competences cover basic behaviour analytic skills including commonly used procedures, such as assessment, behaviour change methods, fundamental elements of behaviour change, as well as philosophical, ethical, and conceptual issues. Person-centred competences and responsibilities include skills such as enhancing social validity and cultural sensitivity. Knowledge-based competences cover concepts and principles that must be understood in order to practice ethically and competently at EuroBA-T level. These areas are targeted in the competence profile for EuroBA-T on the basis of “their potential to contribute to the overall objectives of the Strategy and of the UN Convention, the related policy documents from EU institutions and the Council of Europe, as well as the results of the EU Disability Action Plan 2003-2010, and a consultation of the Member States, stakeholders and the general public“ (European Commission, 2010, p. 4).

Alignment of EuroBA-T competences with

European Qualification Framework (EQF)

EuroBA-T competences are aligned with European Qualification Framework (EQF) Level 3. The terminology used in the EQF (2008) to describe the requirements for students to achieve certain levels of qualifications has engendered debates and modifications (EQF, 2018), especially around the terms of competences, learning outcomes, knowledge, skills, and responsibility and autonomy. “It is argued that it is likely that some key design features, such as the ‘strong’ approach to learning outcomes and a narrow conception of competence will not survive modification and adaptation in the context of the European labour market” (Méhaut & Winch, 2012, p.369). In the context of the IO4, the term “competence” is used to describe general areas of knowledge, skills, and responsibility and autonomy that the student should be competent in, both professionally and personally, after completion of a course aimed at entry-level EuroBA-Technician level training.

The learning outcomes outlined in this document allow course developers to adapt their courses to their local, structural, and cultural diversity. Course developers can use the competence descriptors as guides to define specific learning outcomes that indicate how they intend to ensure that their students meet the competences. This approach is expected to enhance cultural sensitivity of the courses and promote staff mobility across the EU.

Knowledge of the EuroBA-T

The competences in the area of knowledge at the EuroBA-T level align mostly with Level 3 of the EQF. Following the language used in the EQF to describe the attribute of knowledge, the EuroBA-T outcomes focus on knowledge of certain principles and procedures. Since this is an entry-level qualification, this knowledge is meant to be cursory, not yet reaching the levels of comprehensive, critical, or advanced. It is anticipated that the knowledge base of the EuroBA-T will grow on the job as part of continuous professional development.

Skills of the EuroBA-T

The competences in the area of skills of the EuroBA-T align mostly with Level 3 of the EQF. In accordance with the language used in the EQF to describe the skills, the EuroBA-T outcomes focus on the application of measurement strategies, assessment, and intervention procedures. Since the EuroBA-T requires entry-level training, professionals need to be appropriately supervised by a Master’s or Doctoral level behaviour analyst (EuroBA-M; see IO5).

Responsibilities and Autonomy of the EuroBA-T

The competences in the area of responsibilities and autonomy at the EuroBA-T level align mostly with Level 3 of the EQF. Following the language used in the EQF to describe the attribute of responsibilities and autonomy, the EuroBA-T outcomes focus on the ability to adapt their own behaviour and take responsibility for their own actions. While it is anticipated that a certain level of self-management skills should be evident in someone trained to EuroBA-T level, there is the expectation that they will be guided by the mentorship of Master's or Doctoral level trained behaviour analysts (EuroBA-M; see IO5).

EuroBA-T Course requirements

EuroBA-T training provides an entry-level pathway into the profession of behaviour analysis for those without any previous training in the field. The EuroBA-T competences also offer opportunities to professionals from other disciplines to obtain basic training in behaviour analysis. Candidates are encouraged to continue their training towards Master's Level (see IO5).

A person trained to EuroBA-T level must be able to understand instructions provided by a Master's or Doctoral level behaviour analyst in order to apply evidence-based interventions that are based on the principles of behaviour. They need to be able to apply ABA-based interventions in educational, health, and social care contexts for the benefit of the people they support, for example, those diagnosed with Autism Spectrum Disorder (ASD) or Intellectual Disability (ID). They need to be able to strengthen personal skills, or ensure that new skills are acquired and/or that challenging behaviours reduce via non-aversive interventions. They need to be able to adapt procedures to the life project of the person they support, and consistently enhance their quality of life. They must also be able to engage inclusively and with compassion.

A person trained at EuroBA-T level should be able to identify the principles of observing and collecting data; implement observation recording systems; conduct assessments of one or more behaviours or specific features (e.g., preferences); use tools and methodologies for measuring the behavioural repertoire that is the target of the intervention; ensure that the intervention process is socially valid, and respect ethics and cultural differences, based on the different contexts of application.

It is anticipated that the availability of this competence profile for EuroBA-T level training will encourage the development of new behaviour technician courses across the EU. In addition, the guidelines function as a descriptor of behaviour analytic knowledge for consumers and employers. The partner team is committed to supporting these efforts after completion of the present project.

Developers of EuroBA-T level courses should be qualified behaviour analysts (at least Master's level trained; EuroBA-M; see IO5). Oftentimes, course developers and those who deliver such courses also have a PhD and are employed by the university or professional organisation that delivers the courses. The EuroBA-T level courses should include at least 40 hours of tutor-led teaching time (e.g., on-campus or online, synchronous or asynchronous) (see IO6). They should sufficiently motivate students for pursuing a subsequent academic career in behaviour analysis, e.g., Master's level or Doctoral Level.

The competences should be achieved through theoretical training and supervised practice. The competences are assessed though a variety of assessments. The exact detail of the assessment is left up to course developers (e.g., case studies, multiple choice tests, report writing, written exams, oral presentations) and should be culturally sensitive to the context

where the course is taught. At a minimum, EuroBA-T level courses should include the following:

a) Course instruction of not less than 40 hours of tutor-led teaching time (e.g., on-campus or online, synchronous or asynchronous);
b) Guided/supervised practical experience with at least two service users (a total time commitment of no less than 400 hours is recommended to ensure practical skills are practiced, generalised, and maintained);
c) individual student-led study (a total time commitment of no less than 24 hours is recommended to ensure that theoretical knowledge is gained, generalised, and maintained).

Those developing and delivering EuroBA-T level courses should ensure that students are trained in the following areas:

Ethical and deontological issues

Course leaders need to ensure that students are knowledgeable about, and embrace, issues related to the protection of human rights of the persons they support. This may include, for example, teaching about issues related to Intellectual Disabilities, Autism Spectrum Disorders, Neurodiversity, Quality of Life, and evidence-based interventions. Students need to be cognisant of the importance of communication with, and inclusion of, family members/relevant stakeholders during interventions. They need to be able to engage in practice that is culturally sensitive and trauma-informed. They need to be familiar with the relevance of ABA in a national health service system and how interventions can be enhanced through collaboration with multidisciplinary colleagues.

Processes, paradigms, and principles of applied behaviour analysis

Course leaders need to ensure that students are knowledgeable about basic behaviour analytic principles, including classical and operant conditioning, observational learning, rule-governed behaviour. They also need to be familiar with preference/reinforcer assessment and the assessment of functional relations of behaviour interactions in context, as well as generalisation and maintenance of behaviour change.

Operational definition of behaviour, measurement, and experimental designs

Course leaders need to ensure that students are able to describe behaviour in observable and measurable terms. Under supervision, they should be able to apply continuous and discontinuous measurement procedures and record data in graphs for visual analysis.

Principles and procedures for skill acquisition

Course developers and course leaders need to ensure that students are able to identify the essential components of a programme aimed at skill acquisition, including definition and applications of Motivation Operations. They should be able to implement basic procedures under the guidance of a Master's or Doctoral level behaviour analyst (EuroBA-M; see IO5).

Behavioural assessment and procedures for behaviour reduction

Course leaders need to ensure that students are aware of issues related to topography and function of behaviour, assessment procedures and functional analysis.

Overall, course leaders need to ensure that students embrace the importance of enhancing the quality of life of anyone who they are asked to support. Importantly, students should adopt a non-ableist ethos, ensure consent/assent from service users and relevant stakeholders, and engage in continuous professional development to ensure they stay abreast of latest developments, issues, and discourses.

EuroBA-Technician Level Competences

KNOWLEDGE
Knowledge is described as theoretical and/or factual. Knowledge' means being able to talk about an issue competently.
General background knowledge
Relevant data protection and storage legislation, policy, and procedures.
Understanding of the impact of mentalism and explanatory fictions.
Differences between science, pseudoscience, and anti-science.
Data-based decision making, i.e., evidence-based and non-evidence-based interventions.
The role of advocacy and inclusion of clients and key stakeholders in decision making (e.g., PPI; Patient and Public Involvement).
Person-centred planning and the role of the behavioural technician.
How cultural differences impact decisions regarding assessment and intervention (i.e., cultural competence).
Relevant crisis and emergency procedures.
Scope of practice and scope of competence (i.e., ethical practice within the boundaries of competence).
General knowledge about Behaviour Analysis
The seven dimensions of behaviour analysis.
Principles of behaviour.
Functions of behaviour.
Differences between operant and respondent behaviour and procedures.
Basic verbal operants and their functions.
All aspects of social validity, including ensuring importance of goals, appropriateness, procedures, and significance of outcomes.
General knowledge about Behaviour Analytic procedures
Essentials of a behaviour acquisition plan.
Essentials of a behaviour reduction plan.
How to read single-system research graphs.
Issues regarding prompting and prompt dependency.
SKILLS
Skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments). Skills are public and private behaviours that are conceptually coherent with behaviour analysis in relation to the selection, application, and accomplishment of relevant tasks.
Skills related to data collection
Select (under supervision) appropriate dimensions of behaviour and prepare for data collection and storage according to local data protection legislation.
Select (under supervision) and apply measurement procedures (e.g., continuous, discontinuous, permanent-product, Antecedent-Behaviour-Consequences (ABC)-charts).

Complete data entry and display data on appropriate graphs.
Skills related to assessment
Select (under supervision) and apply functional assessment procedures.
Apply preference and reinforcer assessments.
Skills in data collection, graphing, ensuring stable environmental conditions, and identifying stable baselines.
Accomplish reliable interobserver agreement.
Skills related to intervention
Select (under supervision) and apply appropriate contingencies of reinforcement (e.g., various reinforcement schedules, conditioned reinforcers) within the context of culturally competent practice.
Apply a range of skill acquisition procedures (e.g., verbal behaviour approach, Discrete Trial Teaching (DTT), incidental teaching, chaining, simple and conditional discrimination training, stimulus control transfer procedures, prompting and fading procedures, shaping, generalisation and maintenance, token economy, establishment of rule following, imitative, navigational, mnemonic, problem-solving and self-control repertoires).
Select (under supervision) and apply a range of autonomic arousal regulation procedures (e.g., the establishment and reduction of the conditional eliciting power of stimulus events and the generation of arousal monitoring and self-regulation).
General skills
Accomplish compliance with relevant guidelines regarding critical incident reporting.
Accomplish empathetic rapport with clients and relevant stakeholders (i.e., good "bedside manners") and ensure that contextual issues are taken into account (e.g., family bereavement, living circumstances etc).
Select (under supervision) and apply actions that ensure client and relevant stakeholder involvement and client relevant stakeholder dignity.
Accomplish collaboration with other professionals (e.g., for running programs across academic, communication, adaptive behaviour, social competence, leisure, and vocational skills domains.
Accomplish support for training of stakeholders (e.g., caregivers, next of kin, other professionals) under close supervision.
RESPONSIBILITY & AUTONOMY
Responsibility and autonomy are abilities of the learner to apply knowledge and skills autonomously and with responsibility (under supervision).
Adapt own behaviour according to service user and supervisor feedback.
Take responsibility (under supervision) for assisting with individualised assessments and functional assessments, and for conducting preference and reinforcer assessments.
Follow verbal and/or written programme directions from supervisor and independently complete preparation for intervention sessions.
Independently take an objective written record of each session and seek additional clinical direction from supervisor, where necessary.

Take responsibility for communicating with stakeholders as directed by a supervisor and ensure that professional boundaries are respected (regarding dual relationships, conflict of interest, social media).
Adapt own behaviour based on client relevant stakeholder progress, data, and/or feedback, under the guidance of a supervisor.

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