



Article

EUDAPA: Academic, social and employment assessment of an international programme

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Received: 7th December 2020; Accepted: 6th December 2024; Published: 9th May 2025

Abstract: The European Diploma in Adapted Physical Activity (EUDAPA) is an international program focused on the adapted physical activity (APA) field. Students and teachers come from different places around the world in order to share. The aim of this study was to assess the opinion of EUDAPA alumni about the influence of the programme in their applied APA professional knowledge, competences, skills, socialization, and future employment capability. An *ad hoc* questionnaire was developed from a proposed evaluation of those skills, which was assessed and validated through experts' opinion. Thereafter, the tool was sent by email to all of the 136 alumni who took part in the programme between the years 2010 and 2016. Seventy answers were received and then analysed. The results showed that EUDAPA is a programme where the student becomes an APA professional with strong sense of self perception for positive change in the community. Additionally, the students improved their skills, highlighting that EUDAPA is an example of good practice in APA training, because of the academic, social, and employment benefits that they gain from the programme. In conclusion, EUDAPA alumni assessed that EUDAPA has improved their professional skills and due to the exchange possibilities, graduates acquired new social skills and job opportunities.

Keywords: education; international cooperation; EU standards; professional qualifications; disability

Introduction

Adapted physical activity (APA) is defined as “the movement, physical activity, and sports in which special emphasis is placed on the interests and capabilities of individuals with limiting conditions, such as disability, health conditions, or aging” (DePauw & Doll-Teppe, 1989). There are plenty of definitions around this topic, but in all of them we could agree that APA is involving several areas. According to Boursier (2012), APA is a concept that encompasses all the activities, services, structures, and strategies focusing on the social participation and development of individuals with special needs through physical activity and/or sports. This is an area of interdisciplinary and multidisciplinary expertise, including rehabilitation and therapy, physical education and sport, leisure and recreation, and competitive sports at all levels for persons with a disability. In this line, Hutzler (2008) understands this area as a core service and opportunities for the whole society: “APA is a body of knowledge which includes the physical activities of the people with disabilities, the services systems developed in order to achieve their participation, a professional specialization that attracts professionals from pedagogic and academic disciplines”. With all

of those approaches, new methods, advances and tools, we could say that APA is being a way to achieve a better quality of life to those people with disabilities.

From a sport science perspective, APA science is research, theory, and practice directed toward persons of all ages underserved by the general sport sciences, disadvantaged in resources, or lacking power to access equal physical activity opportunities and rights. APA services and supports are provided in all kinds of settings, always relate to the needs of people with disabilities and their rights, in inclusive as well as specific APA programmes (Sherrill & Hutzler, 2008).

Following that idea, including physical activity in the life of people with disability is an extra value for their health. There are large disparities in physical activity participation rates between people with disabilities and the general population, as they are estimated to be 16–62% less likely than the general population to meet the 2010 World Health Organization (WHO) physical activity guidelines (Ginis et al., 2021). However, there is a large corpus of European-level consensus that participation of people with disability in APA and sports is a social right that must be guaranteed by European Union member-states, following the United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2006), the WHO's Global Action Plan on Physical Activity 2018-2030, the UN 2023 Agenda and the European Strategy for the Rights of Persons with Disabilities 2021-2030, to name a few (Van Lindert et al., 2023). Then, we just need to imagine the APA benefits in people with disabilities. Knowing that they have less access to these practices, mobility is often conditioned by the type of disability, and, that a previous assessment of the type of recommended physical activity should be done according with their disability or health condition.

In our view, access to physical activity and sport by people with disabilities is an essential factor in order to have a proper maintenance and improvement of the health condition. This service is provided by the contextual factors and is successful when it promotes the participation of people with disabilities in activities or freely chosen sporting environments. At the same time, the quality of this service needs to be good enough to promote adherence to the practice and the feeling of belonging to a collective. In this line, the Classification of Functioning, Disability, and Health (International Classification of Functioning, ICF; WHO, 2001) rely on a bio-psycho-social model of health, surpassing the previous medical model of disability. Even more, ICF has been proposed as a framework for APA context implementation, terminology (Hutzler, 2007), and to plan carefully physical activities and their impact on health, the importance of material and methodological adaptations of the security during the activity and strategies to facilitate active participation in the development of the activity, even in inclusive settings. In our opinion, all this demands a particular body of knowledge and a professional specialization.

It seems that a graduate in Physical Activity and Sport Sciences needs to have clear competences in APA, definitely, and, at this moment, APA is part of bachelor curriculum in most of European universities, with applications to different settings such adapted physical education, rehabilitation, and sport (Kudlacek et al., 2010), but also active leisure and fitness settings. In theory, after following these studies, these graduates will be ready to perform professional skills in order to provide active, safe, and accessible physical activity and sport service to all, including people with disabilities. For these reasons, it seems necessary to develop and to constantly update the introductory APA courses or studies at all levels of professional preparations in Physical Activity and Sport Sciences studies (Kudlacek & Barrett, 2011). In this line, in describing the functions or activities that may be performed by adapted physical education (APE) professional working in education, training, and human resources management, either directly or indirectly, for example, service, resource, or consultation provider (Klavina & Kudlacek, 2011). EUSAPA defined the APE occupational

standard through a functional map, defining key professional areas (also roles and functions) of APE professionals: (a) planning developmentally appropriate learning experiences in physical education which are also suitable for students with special educational needs (SEN); (b) teaching SEN together with students without SEN; (c) evaluating learning progress of students with SEN and effectiveness of applied teaching and support strategies; and (d) engaging in professional collaboration to improve teaching quality for students with SEN (Klavina & Kudlacek, 2011). These key areas must be recognized in the pre-service training of those undergraduate programmes for APA related professions, such as PE teachers, generalist teachers responsible for teaching a number of subjects including PE, special school educators, teacher assistants, sports coaches in mainstream and disability sports clubs, recreation programme developers, fitness trainers, sports administrators, health care professionals or therapists (Kudlacek and Barrett, 2011).

In this regard, the European University Diploma in Adapted Physical Activity (EUDAPA) was an unique APA European training opportunity and a formation reference in the field and it is known as a specialized international degree programme in APA (Sherrill & Hutzler, 2008) to those indicated undergraduate programmes, has been provided nowadays by Haaga-Helia University of Applied Science in Vierumäki, Finland since the academic year 2009-2010 (Vilhu, 2014). However, its background originally begun in Brussels, in 1997. The former *Diplomé Européen Universitaire en Activité Physique Adaptée* (DEUAPA) programme served as a model for the actual EUDAPA, meaning its evolution. From the very the beginning, and with a clear European vocation, the main aim of this training was “to enrich European education, subdividing it into animation, teaching, training, and management of APA for physical deficiencies, incapacities, and handicaps; encourages the academic recognition of certificates, study, and qualifications acquired abroad; and promotes multilingualism” (Bianco, 2003). At that time, in late 1990s, DEUAPA was organized at the University of Bruxelles and coordinated by Jean Claude de Potter in French language, receiving students from different universities around Europe. Then the programme moved to different universities following a similar format: Torino (Italy, under Dr. Anna Bianco coordination) and Paris X (France, under Dr. Claire Bousier coordination). DEUAPA made a huge effort in order to educate professionals in APA around Europe, but in 2006 the Diploma stopped its activity. During few years, there was no diploma-level and European programme at all. However, from the academic year 2009-2010, the programme restarted in Finland with a new format: EUDAPA, organized at the Haaga-Helia University of Applied Science under the responsibility of the professor Jyrki Vilhu as programme director until 2022. From that time, Vierumäki Sport Campus and its Faculty of Physical Activity has been the base of this new diploma in APA: “APA teachers around Europe, like 30-40 teachers from about 20 universities and about 30 universities, there was a silent statement made: “we need to assure that there will be a European diploma of APA in the future again...” (Vilhu, 2014).

Comparing with the prior DEUAPA, the actual EUDAPA is provided in English instead of French. In both programmes, the training started with the APA training at the home university, followed by an intensive programme, and hosted exchanges programmes abroad. Students are from different Bachelor, Masters, and Doctoral programmes from areas of physical activity (and education), rehabilitation, and social care. In this sense, EUDAPA has been developing alongside with another key international training. the International Master's Degree in Adapted Physical Activity (IMAPA), which was offered at the Katholic University of Leuven. This master's degree has been a reference at the European level (Rintala, 2019) between 1991 and 2022, with a strong research orientation, while EUDAPA has been more focused on professional development. Yearly, about 30 teachers and about 20 students from European universities participate in EUDAPA programme, and about half

of the teachers and students come from non-Finnish universities. These universities have a bilateral Erasmus+ agreement with Haaga-Helia UAS. The other half of teachers and students come from Finland. The extent of the programme is 60 ECTS) where half of it is studied through an intensive 13-week period in Finland. In the first part (10 points), a student has been studied at her/his home university and the diploma is finished by 20 points in work placement. Contents of the 30 points intensive period is consisted by theoretical and practical lectures, some visits to Finnish institutions (rehab centres, prisons, psychiatric hospitals, etc.), and practical projects (in cooperation with Finnish association and institutions). The diploma is granted by Haaga-Helia, and its funding is partly based to Erasmus+ agreements between Haaga-Helia UAS and the participating university. This makes possible to the partner university to support financially the participating student and the teachers as well (Vilhu, 2014).

It is clear that the actual European Diploma in Adapted Physical Activity, (EUDAPA, former DEUAPA) was a unique European APA training for Sport Sciences bachelor students, designed under the concept of exchange mobility and focused on the development of APA professional skills development of their students. For all of mentioned above, the aim of this study was twofold: (a) to assess the general perception about EUDAPA from graduated students, and (b) to evaluate its possible influence in their actual professional career.

Materials and Methods

Participants

Referring to the study participants, the only requirement was to be alumni of EUDAPA cohorts programme between 2010 and 2016, both years included. In total, the instrument was sent through email to all the 136 EUDAPA alumni and their distribution per country is depicted in Figure 1.

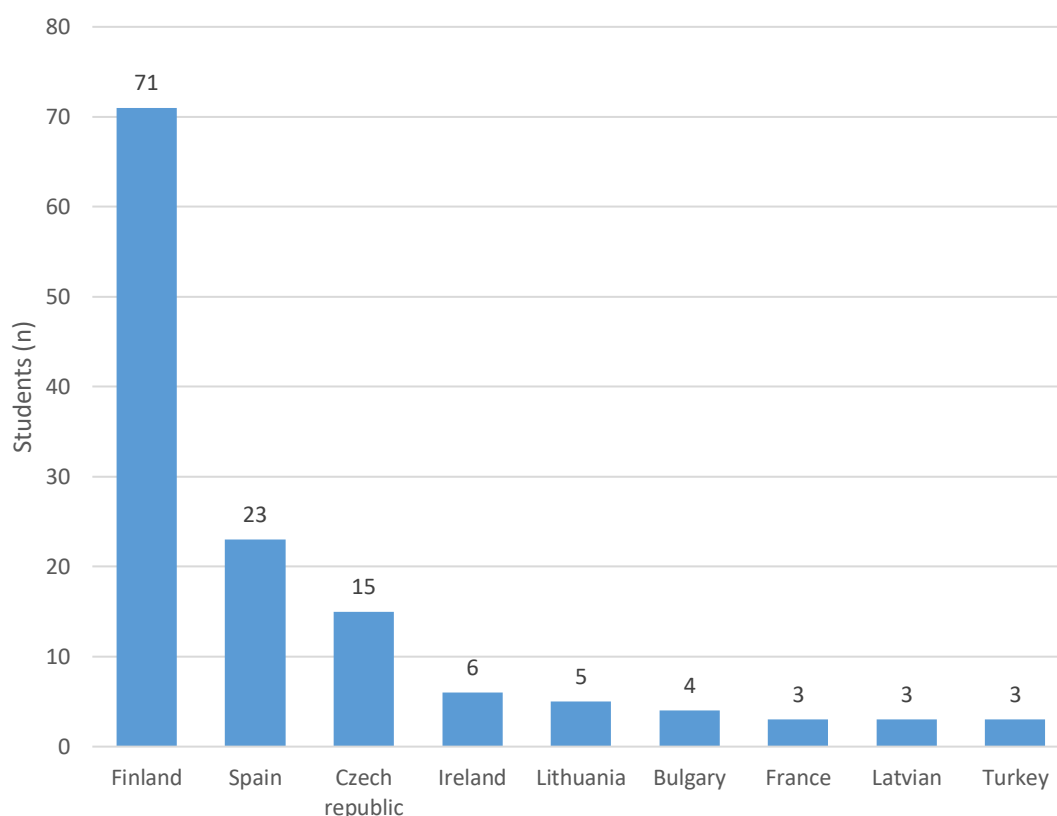


Figure 1. EUDAPA student population from 2010 to 2016: 132 from indicated countries and 4 from other country (Austria, Estonia, Germany, and Italy each).

Instrument

To analyse the opinion of the EUDAPA students, an *ad hoc* questionnaire was designed, structured in six main dimensions: (a) demographic personal data and current situation (age, gender, nationality, EUDAPA cohort, actual job and actual country, six questions); (b) EUDAPA contents received (five questions about themes, education, sports, physical activity; for example: “After EUDAPA studies, if you were a PE teacher, would you be able to adapt your PE lesson in the case you have students with a disability?”); (c) home university (seven questions on previous APA studies, ECTS; for example: “How many ECTS credits have you studied about APA before EUDAPA?”); (d) learning by doing (from Anzai & Simon, 1979; four questions about practices, projects, and trips; for example, “Have you got contact with people / APA institutions during your projects at EUDAPA?”); (e) human resources (four questions about teachers and students; for example, “Having international teachers, is it an advantage for in EUDAPA program?”); and f) six questions about language (for example, “Have you had difficulties following the EUDAPA lessons in English?”), future expectations (for example, “Have you had any work chance thanks of EUDAPA studies?”) and program promotion (for example, “Have you suggested to someone to apply for EUDAPA?”). In total, 34 questions were presented. Every dimension used yes or no answer type questions and 5-point Likert scale questions (from 1 -completely disagree- to 5 -completely agree), ending with an open question for every dimension at the end in order to give opportunity to provide extra information from respondents. The questionnaire was developed in English language, as EUDAPA program is provided. Comparative inquiries between APA knowledge, competences, and skills before and after EUDAPA were included in most of the dimensions. The instrument (dimensions determination, concrete questions per dimension, and development of the questionnaire online interface) was assessed by two APA experts with more than 20 years of (international) experience prior to its administration— one acting as EUDAPA director and another one a professor in the programme— to assure content validity and adequacy to the real EUDAPA aims, academic development, and main characteristics.

Data collection and analysis

After questionnaire designing, it was introduced in an online platform and sent by a link from an email address to all the indicated alumni with a presentation letter attached, where it was explained the main goal of this research. Personal information was used to contact and send to all alumni the questionnaire from EUDAPA organization; however, all answers were anonymous from participants. All respondents signed a written consent for voluntary participation in the study. As part of an academic work, ethical supervision was provided from academic officials. The study was performed in accordance with the Declaration of Helsinki (World Medical Association, 2014). After receiving the email, respondents had seven days to respond. For data analysis and processing, Microsoft Excel was used. Following data collection, descriptive and narrative analysis of the answers was performed.

Results

More than 50% ($n = 70$) of the EUDAPA participants from 2010 to 2016 participated in this study (Figure 2). Related to demographic data and actual situation, those 70 ($M_{\text{age}} = 25$ years old, $SD = 3.6$), with a bigger proportion of females than males (50 females, $M_{\text{age}} = 24.6$ years old, $SD = 2.9$ vs 20 males, $M_{\text{age}} = 25.9$ years old, $SD = 4.1$) and coming from 13 different European countries: Finland (24), Spain (16), Czech Republic (10), Lithuania (4), Ireland (3), Bulgaria (3), France (3), Latvia (2), Turkey (1), Italy (1), Austria (1), Germany (1), and Estonia (1). Results presentation from the instrument by questions and dimensions will be grouped in three main topics to enhance their application and exposition clarity.

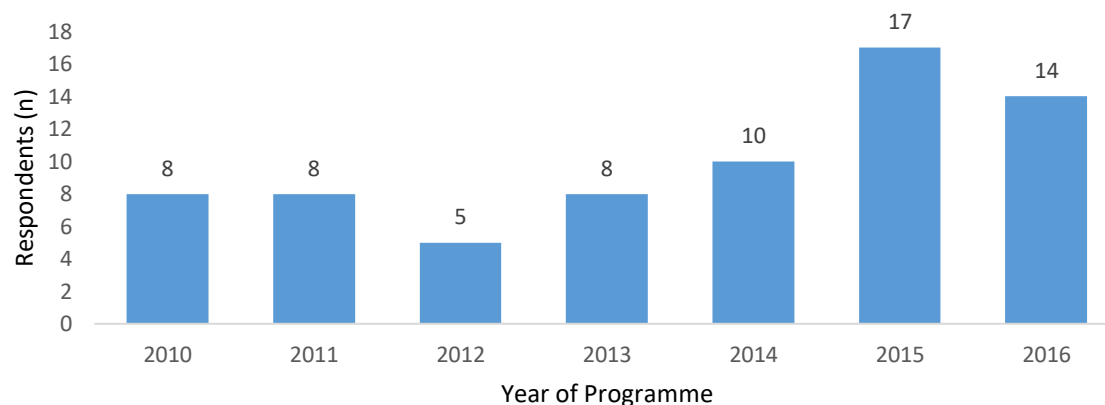


Figure 2. EUDAPA respondents according to a given academic year.

EUDAPA's academic influence

In opinion of most of the alumni, EUDAPA programme has improved their APA knowledge, skills, and competences comparing with the education received at their home universities, as 75% of the respondents studied less than 12 ECTS related with APA prior to the EUDAPA. This programme significantly more education in APA over the course of three months many home university degree does. When comparing topics taught during EUDAPA and those received at the home university, the contents less frequently covered at home university comparing to EUDAPA including physical activity in the prison (EUDAPA 67 vs home 21), spina bifida (68 vs 37), and amputations (44 vs 32). In this line, almost a 18% of the respondents did not receive a compulsory APA subject in their home universities, meaning that if the student does not choose an optional APA subject, they would finish the degree without any APA knowledge, skills, and competences during their studies. Dealing with opinion about the students' skills improvement, the responses were very clear: after EUDAPA studies, they felt more competent as professionals in the different APA contexts: a 43% more competent for being a physical education teacher (Table 1), a 38 % more competent for being a sport coach, and 52% more competent for being a physical activity instructor. In relation to EUDAPA teaching method, most of the students agree or totally agree that "Learning by Doing" is the best way to learn. In addition, 67% of them stated that they discovered their favourite area of APA during the practices. This suggests that, thanks to this method, they had the opportunity to discover in which APA field they would like to develop their professional future. Furthermore, there is again an important distinction between home university and EUDAPA studies.

Table 1. Comparison of Physical education skills after EUDAPA (n=70) %.

Studies	Physical Education	Agree (%)
EUDAPA	Are you able to adapt your PE lesson in case you have some students with disabilities?	98
	Are you able to be PE teacher for people with disabilities?	98
	Are you able to apply APA in a regular lesson?	94
	Are you able to teach APA to other teachers?	74
Home university	Are you able to adapt your PE lesson in case you have some students with disabilities?	60
	Are you able to be a PE teacher for people with disabilities?	48
	Are you able to apply APA in a regular lesson?	53
	Are you able to teach APA to other teachers?	30

Note: Agree (%) = (agree) and (totally agree) combined.

From the results 37% of the students did not have any practice during the APA subjects with people with disability in their home university. It is a surprising data if we think that without real clients, as students could not have a real experience for their future. In this way, the comparison with EUDAPA is even more significant because of this question: “Have you learnt during the practice with real people with disabilities more than with your classmates?”. From 70 respondents, 68 students answered that they have learn more with real people (97%). This means that most of the students appreciated direct contact with disability during the practice, even those with no experience with real clients because their university could not offer that opportunity.

As mentioned, EUDAPA programme includes some projects and trips where the students are the leaders or responsible for the activity as part of the learning process. Most of the students agreed that they have improved their leadership skills. A positive result in our opinion for the future professional life of the students is that, after EUDAPA studies, 97% of them feel able to organize any sport event or camp for people with disabilities, a clear indicator of leadership skills improvement. In addition, APA includes many camps or similar activities, which could open even more job opportunities based on those skills. Finally, student valued the international approach to APA through teachers from different countries. Students agree that having international teachers is an input for EUDAPA, likely because 52 out of 70 did not have any international teacher previously in their studies. Moreover, English as a main language during the program has made the students abler in the sport field, APA area, and in their general life because according to their answers, 99% of the respondents have improved their English skills after the program.

EUDAPA’s social influence

The students’ heterogeneity and the international orientation of the EUDAPA programme is clear: 15 out of those 70 respondents were not living in their home country at the moment of the study, meaning those 15 did not return to their country of origin. This could mean that after EUDAPA studies people are not afraid to try new experiences abroad whether for studies or job opportunities. Analysing the cultural factor, 93% of the respondents reported experiencing new places and cultures, thanks to EUDAPA trips. Moreover, in those trips, 72% of the students have enjoyed APA sport competitions.

Table 2 shows answers from the respondents that, in our opinion, presents the social benefits that students gain from this Diploma. Most of them agree with the idea that having international classmates is a positive input for EUDAPA. Also, they stated that they have enjoyed every kind of experiences with their group during the three months of program. Moreover, respondents think, almost in their totality, that they have new knowledge from their international colleagues. In order to keep in touch with each other, maintaining contact for new job opportunities, or share news, students think that making a platform for professional exchange would be a great idea. We would like to remark the valuable contribution of the students in promoting this programme. Social media platforms can help in the future and most of the promotion of the programme was made by the students themselves. They suggest EUDAPA to their colleagues, even introducing new students in the next editions, and the respondents are motivated to promote this programme in their home universities.

Table 2. Social facts of EUDAPA (n=70).

Question	Yes (%)
Having international classmates, is it an input for EUDAPA programme?	99
Do you have gained new knowledge from your classmates during EUDAPA programme?	99
Have you enjoyed sharing 3 months studying, working, traveling, and living with your EUDAPA colleagues?	98
Are you still in contact with some of your classmates nowadays?	92
Have you met with some of your classmates after EUDAPA program?	90
When the programme ends, could EUDAPA colleagues be transformed into a network of APA?	90
Have you suggested someone apply for EUDAPA?	89
In case that you have suggested someone apply for EUDAPA, have any students join in EUDAPA programme because of your experiences and suggestion?	49
Would you suggest your home university promote EUDAPA, in order to send their students every year?	99
Would you like to have access to a platform that you could share contacts and work opportunities of APA?	99

Employment analysis

When referring to actual work situation, 22 out of 70 were students yet, 15 were already teachers (at different educational levels, from preschool to university), 14 were engaged in APA workplaces, six were sport instructors or coaches, four were physiotherapist, three worked in sport management areas, three have workplaces not related workplaces (i.e., seller, secretary, and lifeguard), and three were unemployed. Based in the data, educational and APA related settings were the priority work areas for EUDAPA alumni. Between the 22 students, four were research oriented (i.e., master's) and one PhD student, while between teachers, two of them were teaching at university level. About work network opportunities, 19 respondents have worked with some EUDAPA colleagues after the programme. Even that the number is not very big, the fact remains that this programme serves as a link for the rest of the students' lifetime. Students were requested for some answers that show clearly that, thanks to EUDAPA, they have jobs opportunities, for instance, because of the presence of EUDAPA degree in their curriculum vitae. It is glad to see that an important number of students are already working as an APA professional (Table 3) in different settings. It should be noted that nine out of 70 respondents were working in a country different than the one they came from at the time of the study.

Table 3. Employment facts of EUDAPA (n=70).

Question	Yes (%)
Do you feel like a better sport professional after EUDAPA programme?	99
Have you worked before EUDAPA in APA area?	54
Are you working in APA area nowadays?	59
Have you received any job opportunities through EUDAPA programme?	40
Have you received any job opportunities thanks to EUDAPA studies (CV)?	60
Have you worked with some of your classmates after EUDAPA programme?	28

Discussion

This study presents original research assessing an APA programme like EUDAPA in the academic, social, and employment development in their alumni. We truly believe this kind of training is needed at European level to maintain APA as a scientific and academic area, but also as occupation, service-oriented profession, and leaders in health and sport

promotion in people with disabilities. EUDAPA is a programme which has been running more than ten academic years in Finland, its students and teachers are coming from different universities around the world (mostly Europe), and the number of 136 students and 51 teachers so far (at the moment of data collection of this study) shows that this Diploma has a past, a present, and a future. However, the discussion should be focused on if EUDAPA students have learnt in the past, whether they are using its knowledge in the present and whether, thanks of this programme, they are working in the APA field, now or in the future. In our opinion, this is the best way to provide an useful feedback to EUDAPA itself from this study, and also as a reflexion of EUDAPA as an international example of APA professional development at European level.

One important remark is that no studies have been found regarding APA training at European level and its influence on students' skills, knowledge, and competences, so this study seems to be original. Nevertheless, we can compare the results with the specific competences or skills that the graduate of the bachelor's degree in Sport Sciences should have in relation to APA (Hernández-Álvarez & Jiménez-Monteagudo, 2013) with specific interest in rehabilitation, education, and sport professional fields (as referenced at EUSAPA, Kudlacek et al., 2010). Probably, especially after the pandemic in 2020, other areas such as fitness and leisure must be of interest in the professional scope and should be included in the APA bachelor training curricula, as they are nowadays at EUDAPA. In this regard, we consider that EUDAPA provides all of those professional competences through the projects' planning, practice experience with real people with disabilities, lessons from different APA experts around the world, and, as a clear example, inclusion trips. In addition, if we emphasise again the EUDAPA methodology, students will gain those skills by practicing: it means that they know had their competences are at the same time that they try to apply them in their professional future. In this sense, EUDAPA seems aligned with the proposed key competences, skills, and knowledge for a quality APE profession, as indicated by Klavina and Kudlacek (2011) and Kudlacek and Barrett (2011). Even more, from the answers of the alumni to the questionnaire, it also appears aligned with Hodge, Lieberman, and Murata (2017), as these authors stated that the APE specialist should (a) be informed about unique educational needs of students with disabilities; (b) work in consultation with other teachers of SEN and other professionals such as occupational therapists and physical therapists; (c) become familiar with the proper use of specialized and adaptive equipment; (d) engage students with disabilities in appropriate learning experiences that can be applied in daily life; and (e) evaluate, plan, and instruct in the motor domain in accordance with each student's individual educational plan. In our opinion, EUDAPA cover those training opportunities, and that is why probably is a milestone as an example of good practice for APE professional in Europe (Kudlacek & Barrett, 2011).

A recent update of EUSAPA (Ng et al., 2021) on the occasion of the COVID-19 pandemic, revealed low levels of technological content knowledge among APE teachers, who were assessed in their (a) technological skills (using a communication inventory, modified versions of the Technology, Pedagogy, and Content Knowledge scale, TPACK-21) and (b) Self-Efficacy on including Students with Disabilities in Physical Education scale (SE-PETE-D; Block et al. 2014) perception. Then results were used to inform experts to create technological update for EUSAPA. Authors suggested the need to add new functions to EUSAPA including the incorporation of a new key role with four key functions 'Apply different teaching strategies to motivate all students' learning. In our opinion, this new APE abilities should be implemented along APA programs, and future studies may assess their inclusion in EUDAPA programme. Another challenge after the pandemic is the actualization of the national legislation at European level, having into consideration the specificity of every country and the role of people with disability in the inclusion processes in sport at levels (van

Lindert et al., 2023). EUDAPA is a life experience, as we can infer from their memories of the programme, after living three months in Finland. If we examine the results, we can appreciate that most of the students have suggested to their colleagues that they should join EUDAPA in the future. This suggests that they have really enjoyed the programme. Regarding promotion, the data is even more impressive, as 99% of the respondents would like to promote EUDAPA in their home universities. Clearly, based on the students' opinion following the program, it was successful.

Most of them shown, as well, that they have appreciated having international teachers and classmates. This is an extra value for the programme because is a unique opportunity during the university period. Having an international background at the home university is not common, as they stated in their answers. In addition, traveling abroad for and during EUDAPA projects is a big incentive. Most of the respondents had studied fewer than 12 ECTS related with APA before EUDAPA. This suggests that, although students in the programme were motivated to learn from this field, their experience in the field was limited. However, we could say that their attendance in this Diploma has open new ways in their life, because nearly up to 60% of them were working in APA field at the moment of the study. In this sense, EUDAPA is clearly a good way to provide adequate knowledge, skills, and competences to future APA professionals, promoting their capabilities in PE, sports, and physical activity fields. In this line, this research can serve as recommendation for future EUDAPA evolution as topics related with amputation (mainly), deafness, and autism seems not well covered, as some alumni missed them.

"Learning by doing" method (based on the theory from Anzai & Simon, 1979) was perceived as positive, as respondents answered that during the practices, they have improved themselves at the same time that they had new experiences and even more, they discovered their future work field. Also, most of the students said that they have improved their skills in English, and it is really important in order to get a job. In addition, EUDAPA alumni agreed that after the program they can build an international network with teachers and classmates in order to improve APA field. One indicator of the potential of EUDAPA to promote international work mobility is the fact that more than 10% of respondents were students (7), researchers (1), or PE teachers (1) in a different country than their country of origin at the moment of the study. We should also highlight that nearly two-thirds of respondents continued their studies at the moment of the study, with five of them at master's or doctoral level, which appears good to the field of APA and sport sciences in order to promote future academics in the fields.

Students of this programme have been studying abroad and some of them nowadays are working out from their home places as well. EUDAPA maybe has broken the barrier that could make people afraid of pursue a job abroad. Sometimes, the knowledge you need is thousands of kilometres far from home and if you have had an experience as EUDAPA programme (where you can see the huge diversity of ideas, methods, and opportunities), those three months may have a lasting impact on your mindset. We have seen academic improvements for example, comparing with home university. In addition, improvements in social dimensions were found, making networks or working with old EUDAPA classmates, that even we have realized that there are remarkable employment improvements possibilities due to the wide vision of the world after EUDAPA programme. Definitely, in our opinion, EUDAPA should keep running next years because results are positive in each dimension analysed in this study, when asking EUDAPA alumni. One indicator of the international network possibilities after EUDAPA, in our opinion, is the fact that 12% of respondents were studying or working abroad after EUDAPA, so it seems the programme facilitates opportunities for exchange and development in the APA field.

Research has demonstrated the importance of these graduate and postgraduate opportunities in the APA field for professional specialisation. For instance, the meaning that first-year APE teachers with a master's degree ascribed to their occupational socialization experiences was mainly related with (a) interactions with people with disabilities and activity experiences, (b) recruitment of APE teacher education students, and (c) graduate training and initial work experiences (Holland & Haegele, 2020); topics highlighted by the participant teachers as crucial in their professional APA development. However, the literature on this sense is still very sparse, and also the opportunities for APA professional specialization are very limited. In this sense, the most well-known study programme European Masters in APA started in 1991 with nine participating universities and grew to 29 in year 2004-05. It was later transformed into Erasmus Mundus Masters in APA and after termination of EU funding shortly transformed to International Masters in APA (Kudlacek et al., 2024). Unfortunately, this postgraduate programme ended during the academic year 2021-2022. In our opinion, efforts should be made in order to promote APA educational programs at graduate and postgraduate level across different European universities in the near future, due to their vocational and professional influence towards APA, but also to promote young academics and researchers in the field of APA. As limitations of this study, we can cite that the number of responses from alumni was more than the half of the total, though it could still be improved. Also, the seniority of the alumni was not controlled, what is a potential study in the future. The instrument used should follow validity and reliability measures, apart from the expert validity used. Probably, a mixed method including qualitative research methods (interviews or focus groups) will deepen the influence of EUDAPA in the future students. We also have to mention that this study did not control recall bias (as systematic difference in the ability of participant groups to accurately recall information), neither social desirability bias (as a tendency to answer questions in such a way as to present themselves in socially acceptable terms). Future studies about the influence of programs like EUDAPA should address these biases. A limitation is also the retrospective approach of the study design, asking for EUDAPA skills and professional competences obtained from opinion of the students, while their professional experience is still limited. As such, we cannot draw conclusions from these opinions regarding the skills needed for their professional development or considerations related to the educational system of their (specific) country. Finally, as next step, following cohorts from this study should be examined in order to analyse the evolution of EUDAPA program's influence on alumni knowledge, skills, and competences. The comparison between future study applications and alumni evaluations at the programme should be of potential interest. In this regard, influence of the program in alumni career and employability after the programme should be studied in the context of the different countries where alumni are working nowadays, taking into consideration the peculiarities and context of every participating European country (van Lindert et al., 2023).

Conclusions

The implementation of the EUDAPA programme for ten years has been successful, as we can highlight from the past students' opinion with the indicated limitations from those. The academic, social, and employment valuable influence EUDAPA is clear in the responses of the students, and this have important implications in how APA should be provided in academic setting, but also in professional development. The general opinion of the EUDAPA students is that they have improved their skills in several areas during their three months of programme. EUDAPA students felt competent to access to professional APA field thanks to the programme. Due to its uniqueness and positive application, this programme deserves to continue.

Perspectives

The findings of this study include some implications related to professional skills development in APA. Firstly, the implementation of the program over the academic years seems successful in students' opinion. Secondly, the academic, social, and employment influence of this international program, regarding professional skills, was perceived as very positive. Thirdly, data shows that it is a productive programme due to the employment success after it. Finally, the programme reverts satisfactorily to the student's participants in educational, social, and APA training fields.

Unfortunately, during the publication process of this article, EUDAPA as educational programme ended during academic year 2023-2024 due COVID-related restrictions and changes in funding (Kudlacek et al., 2024). However, as indicated by these authors, an initiative has emerged from Palacky University (Olomouc, Czech Republic), Haaga-Helia (Vierumäki, Finland), and Munster Technological University (Kerry, Ireland) to reform and adapt the EUDAPA programme to incorporate Hybrid Erasmus mobilities, combining online learning with practical training (Kudlacek et al., 2024). Also, these authors stated that to provide high-quality professional services in APA, there is a requirement for academic programs that train professionals in sports, rehabilitation, leisure, and physical education. Most of these programs are integrated into national training frameworks, often within physical education teacher preparation or other sports science areas. These nationally based programmes (also at postgraduate level sometimes) are very diverse, not all countries offer such programmes and the professional opportunities in APA vary greatly from one country to another. Simultaneously, there is an increasing demand for qualified personnel to support inclusion in PE, leisure, and sports. For all that reasons, it appears that a programme such as EUDAPA is more needed than ever.

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Author Contributions: Conceptualization: R.M.C., J.V. and J.P.T.; Data collection: R.M.C. and J.V.; Data analysis: R.M.C. and J.P.T; Writing, review, and editing: J.P.T, R.M.C., and S.G.G.

Funding: This research received no external funding.

Availability of data and materials: The data are not publicly available due to privacy or ethical reasons

Conflicts of Interest: The authors declare no conflict of interest.

References

- ANECA. (2006). *Libro blanco del Grado en Ciencias de la Actividad Física y del Deporte* [White paper for the Degree in Physical Activity and Sports Sciences]. https://www.aneca.es/documents/20123/63950/libroblanco_deporte_def.pdf/43809f93-1aa1-11cd-4983-60161d31d6a9?t=1654601717192
- Anzai, Y., & Simon, H. A. (1979). The theory of learning by doing. *Psychological review*, 86(2), 124. <https://doi.org/10.1037/0033-295X.86.2.124>
- Bianco, A. (2003). *Diplome European Universitaire en activite physique adaptee* [DEUPA, information booklet in five languages describing years 1997-2000] Torino, Italy: SOCRATES/ERASMUS. (p. 93/99).
- Block, M. E., Hutzler, Y., Barak, S., & Klavina, A. 2013. Creation and validation of the self-efficacy instrument for physical education teacher education majors toward inclusion. *Adapted Physical Activity Quarterly*, 30(2), 184–205. <https://doi.org/10.1123/apaq.30.2.184>
- Boursier, C. (2012). Playing sports with a disability: Adapted physical activity (APA). *La nouvelle revue de l'adaptation et de la scolarisation*, 58. Paris: Hervé Benoit.

- DePauw, K. P., & Doll-Tepper, G. (1989). European perspectives on adapted physical activity. *Adapted Physical Activity Quarterly*, 6(2), 95-99. _
<https://doi.org/10.1123/APAQ.6.2.95>
- Ng, K., Klavina, A., Ferreira, J. P., Barrett, U., Pozeriene, J., & Reina, R. (2021). Teachers' preparedness to deliver remote adapted physical education from different European perspectives: Updates to the European standards in adapted physical activity. *European Journal of Special Needs Education*, 36(1), 98-113.
<https://doi.org/10.1080/08856257.2021.1872848>
- Ginis, K. A. M., van der Ploeg, H. P., Foster, C., Lai, B., McBride, C. B., Ng, K., Pratt, M., Shirazipour, C.H., Smith, B., Vásques, P.M., & Heath, G. W. (2021). Participation of people living with disabilities in physical activity: a global perspective. *The Lancet*, 398(10298), 443-455. [https://doi.org/10.1016/S0140-6736\(21\)01164-8](https://doi.org/10.1016/S0140-6736(21)01164-8)
- Holland, S. K., & Haeghele, J. A. (2020). Socialization experiences of first-year adapted physical education teachers with a master's degree. *Adapted Physical Activity Quarterly*, 37(3), 304-323. <https://doi.org/10.1123/apaq.2019-0126>
- Hernández-Álvarez, J.L., & Jiménez-Monteagudo, M.L. (2013). La formación inicial para una educación física inclusiva: situación, prospectiva y competencias [Initial training for inclusive physical education: situation, perspective and competencias]. *International Journal of Medicine and Science of Physical Activity and Sport*, 13. Retrieved from: <https://www.redalyc.org/pdf/542/54228442004.pdf>
- Hodge, S., Lieberman, L., & Murata, N. (2017). Essentials of teaching adapted physical education: Diversity, culture, and inclusion. Routledge.
- Hutzler, Y. (2008). APA as a tool for assessment and intervention: a point of view IFAPA. In Pérez-Tejero, J. (Ed.) *Discapacidad, calidad de vida y actividad físico deportiva: la situación actual mirando hacia el futuro* [Disability, quality of life and sports physical activity: the current situation looking towards the future] (pp. 181-207). Dirección de General de Deportes de la Comunidad de Madrid.
- Hutzler, Y. (2007). A systematic ecological model for adapting physical activities: theoretical foundations and practical examples. *Adapted physical activity quarterly*, 24(4), 287-304. <https://doi.org/10.1123/apaq.24.4.287>
- INEF. (2014). Bachelor's degree sport Science, INEF UPM: According with the Faculty Board on 19th December, 2012, with favourable answer of ANECA on 15th July, 2013.
- Klavina, A., & Kudlacek, M. (2011). Physical education for students with special education needs in Europe: findings of the EUSAPA project. *European Journal of Adapted Physical Activity*, 4(2), 46-62. <https://doi.org/10.5507/euj.2011.008>
- Kudlacek, M., & Barrett, U. (2011). Adapted physical activity as a profession in Europe. *European Journal of Adapted Physical Activity*, 4(2). <https://doi.org/10.5507/EUJ.2011.005>
- Kudlacek, M., Morgulec-Adamowicz, N., & Velleren, J. (Eds.). (2010). *European standards in adapted physical activity*. Palacký University.
- Kudláček, M., Reponen, M., Barrett, U., & Jesina, O. (2024). European diploma in adapted physical activity (lessons learned from history - vision for future). European Congress of Adapted Physical Activity (EUCAPA) book of abstracts. *European Journal of Adapted Physical Activity*, 17(10), 125. <https://doi.org/10.5507/euj.2024.007>
- Rintala, P. (2019). Quality partnerships in adapted physical activity. *European Journal of Adapted Physical Activity*, 12(7). <https://doi.org/10.5507/euj.2019.012>
- Sherrill, C., & Hutzler, Y. (2008). Adapted physical activity sciences. In J. Borms (Ed.), *Directory of sport science* (5th ed., pp. 89-103). ICSSPE/CIEPSS.
- van Lindert, C., Scheerder, J. & Brittain, I. (2023). (Eds.) *The Palgrave handbook of disability sport in Europe*. Palgrave Macmillan.
- Vilhu, J. (2014). Training and professional opportunities in APA across Europe: EUDAPA. In R. Reina & J. Pérez-Tejero (Eds.), *European Congress of Adapted Physical Activity – EUCAPA 2014: book of abstracts*. Publicaciones del CEDI – 5 Series. Universidad Politécnica de Madrid, Fundación Sanitas, Psysport.
- World Health Organization WHO. (2001). International classification of functioning, disability and health. Geneva: World Health Organization.

<https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health>

World Medical Association. (2014). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *The Journal of the American College of Dentists*, 81(3), 14-18. <https://www.acd.org/wp-content/uploads/2018/01/jacd-81-1-2014-3.pdf>



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