Vocational training for employment of adults in Europe: state of the art

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Abstract

This paper approaches adult vocational training from an analytical and comparative point of view in order to understand, on a theoretical and practical level, how this training has an impact on the labour market and its beneficiaries. The PRISMA methodology is used for this purpose. Based on the search terms collected in the UNESCO Thesaurus, we initially analysed 136 articles located in impact journals included in Scopus and Web Of Science. After an exhaustive analysis process, a total of 11 papers were collected. The results show that adult Vocational Education and Training is a field of study with great potential. Although there is still work to be done and it is necessary to unite social agents and entities in order to improve the system, more and more countries are opting for it and its promotion. Vocational training for employment has proven to have a high impact on its users, both on a personal and professional level. We cannot forget that each country has a different system and division, so in this article we have dealt with all those training processes aimed at improving or obtaining employment, aimed at people over 16 years of age.

Palabras clave

PRISMA
Educación de adultos
Competencias
Mercado de trabajo

Resumen

El presente trabajo aborda la Formación Profesional para adultos desde una visión analítica y comparativa con el fin de comprender, a nivel teórico y práctico, cómo repercute esta formación en el mercado laboral y en sus beneficiarios. Para ello se emplea la metodología PRISMA. A partir de los términos de búsqueda recogidos en el Tesauro de la UNESCO, analizamos inicialmente 136 artículos localizados en revistas de impacto incluidas en Scopus y Web Of Science. Tras un exhaustivo proceso de análisis el resultado fue un total de 11 trabajos recopilados. Los resultados muestran cómo la Formación Profesional en las personas adultas supone un campo de estudio con gran potencial. Pese a que todavía queda trabajo por hacer y se hace necesaria la unión de agentes sociales y entidades en pro de la mejora del sistema, cada día son más los países que optan por ella y su promoción. La Formación Profesional para el empleo ha demostrado tener un alto impacto en sus usuarios, tanto a nivel personal como profesional. Se hace constar que cada país presenta un sistema y división distinto, por lo que en este artículo se abordan todos aquellos procesos formativos enfocados a la mejora o consecución de un empleo dirigidos a personas mayores de 16 años.
Adult education and training is an increasingly present modality, although not sufficiently studied. In recent years, it has been driven, among other reasons, by current demographic changes related to population aging, recent migrations, and inclusion and employment issues in Europe (Fombona & Pascual, 2019). However, despite the importance it is gaining in the scientific and research field, policymakers and educational authorities rarely take note of these studies (Maurer, 2022). This form of education is included in lifelong learning processes (Jurane-Brēmane, 2019) and, therefore, provides a pathway to develop the skills of its users, increase their knowledge, improve their technical and/or professional competencies, as well as change certain attitudes and behaviors that enable personal, social, economic, and cultural empowerment and development (Iñiguez-Berrozo, 2020; Kapu et al., 2012; Titmus et al., 1985; Windisch, 2015).

Based on the premise that the full development of each individual’s potential must be guaranteed (UNESCO, 2022a), the challenges we face daily, both personally and professionally, make education a fundamental pillar to address them, regardless of age or personal situation. In fact, the European Commission (2009) and the European Centre for the Development of Vocational Training (2016) (CEDEFOP) and UNESCO (2022b), consider adult education as an essential resource to achieve social and economic inclusion of adults with low levels of education.

In order to improve this training system regarding adult education, the Global Report on Adult Learning and Education, known as GRALE (UNESCO, 2022c) is developed. It reflects the need to increase attention paid to both training and the groups that access it. Specifically, special attention is paid to the educational development of vulnerable groups—women, older people, people with disabilities, migrants, socially excluded groups, etc.—. These are precisely the groups that seem to not benefit from this training, which represents a failure to achieve what we could call “social justice” (Altunay & Bakir, 2021). According to the National Institute of Statistics in Spain (2022), 4.7% of migrants in Spain are illiterate or have not completed primary education, and 39.1% of men and 32.6% of women (aged 25 to 64) in Spain have a level of education corresponding to the first stage of secondary education or lower. Additionally, 39% of people with disabilities in Spain are either illiterate or have only obtained primary education (INE, 2012).

Referring to what Barabasch et al. (2021) have stated, throughout this article, we use the concepts of “vocational training” and “adult education” interchangeably, referring to all types of education and training aimed at obtaining remunerated income and related to the labor market for individuals over 16 years of age, considered of working age.

We must also consider that human capital constitutes a fundamental part of social development (Djibril et al., 2020). Although it may seem negative to offer an economic view of adult education (Fejes, 2006), the reality is that this training has a potential economic impact and adaptation to the labor market, serving as the foundation for users to advance in their education and personal development (Desjardins, 2019). For this reason, the evolution of training institutions has been linked to the political-economic system, with skilled labor training systems strongly influenced by the nature of market economies and labor market relations in different countries (Persson & Hermelin, 2018). In any case, it is important not to overlook the role of the users. They are the driving force behind the continuation of this training and ultimately its reason for existence. For this reason, it is crucial to pay attention to their motivations, expectations, and personal and professional impact for the continuity of the system and, therefore, for the improvement of the human and economic capital of a society.

It is precisely its potential impact on the labor market that drives and increases interest, not only for users but also for companies and governments that support and finance adult education (Desjardins, 2019). Improving job performance and adapting training to the needs of the environment are key factors that motivate stakeholders to participate in and finance training. Therefore, many authors emphasize the need for agreements and collaboration between those responsible for the training system and the labor market, companies, and employers who can oversee the practical training and work of participants in training processes (Abd Samad et al., 2018).

For this reason, research on vocational training addresses various aspects, from knowledge of legislative measures in the training system to professional goals and motivations of users, as well as the transferability of acquired learning and remuneration of jobs obtained after training activities (Achatz et al., 2022).

In this context, it is necessary to highlight that each country has a diverse structure and content based on the socioeconomic context in which they take place (Papadopoulos, 2022), as well as the responsibility for their management within the training system (Andersson & Muhrman, 2022; Gleerup, 2001; Illeris, 2001; Rasmussen & Lolle, 2021). Consequently, we could infer that, although with different names, the main objectives pursued are similar: providing basic skills to previously uneducated individuals—especially focusing on migrant populations—as well as providing tools and competencies for continuing middle and higher education or preparing for the labor market. Authors such as Deissinger & Gonon (2016), Pilz (2016), or Persson & Hermelin (2018) indicate that perhaps the greatest differences may arise from the involvement of the state and industry/labor market in training, and consequently, this issue would condition the relationship of training activities with the formal education system or the labor market. It is also worth noting the system of recognition of competencies that an increasing number of people with work experience but without certified studies are turning to. In this way, individuals have the opportunity to obtain a qualification that certifies the possession of at least the necessary competencies for the development of their job role (Cooper et al., 2017).

Therefore, the focus of our analysis is on vocational training for employment. Based on this premise, we question what impact vocational training systems have on adults participating in training processes regarding their professional career and personal identity. All of this is framed from a European perspective.
Method

Objectives

The general objective is to understand the personal and professional impact of the Vocational Training System on adults from a European transnational perspective. The specific objectives of the study are as follows: identify the personal impact of vocational training on adults’ personal development in European countries; and identify the professional impact of vocational training on adults’ personal development in European countries.

Data source and database search

For this study, the guidelines for systematic reviews and meta-analyses PRISMA updated by Page et al. (2021) were followed, which includes a checklist with 27 items and a flow diagram for tracking. For this systematic review, searches were conducted in the Scopus and Web of Science (WOS) databases. The information search was conducted in November 2022 (starting at the beginning of November 2022 and extending until mid-November). The search in the databases was designed following the PICO acronym (Landa-Ramírez, 2014): “P”, population; “I”, intervention, “C”, comparison, and “O”, outcome (See Table 1 for the search equations used in each of the databases WOS and Scopus).

Key terms from the UNESCO Thesaurus and Boolean operators such as “and” and “or” were used to develop the search equations. The search period was set as the last five years (2018-2022) to capture new trends, innovations, or knowledge related to the research topic.

Search criteria

The inclusion criteria were as follows: 1) study population of possible unemployment age and/or unemployed individuals; 2) studies in the educational field; 3) published studies; 4) studies on European countries; 5) studies on tools/skills/resources for employability; 6) studies published in the last five years (2018-2022); and 7) articles published on the topic, in English, Spanish, and French.

Furthermore, the exclusion criteria were: 1) studies that do not address the topic in European countries; 2) studies that are not in the educational field; 3) systematic reviews; 4) education articles that do not meet inclusion criterion 5; and 5) studies with child populations and/or too young to be in a possible unemployment situation.

Once the search was conducted based on the criteria described above, duplicate records were removed. In the first screening, the title and abstract of the found records were analyzed. In the second screening, the full text of the selected articles from the previous step was reviewed.

Results

Initially, 139 articles were found after searching the Scopus (n = 67) and WOS (n = 72) databases. Only five articles were eliminated due to duplication. A total of 134 articles were reviewed based on their title and abstract, and 69 were excluded for not meeting the initially proposed criteria. The amount of 65 articles were fully reviewed as potential candidates for inclusion in the systematic review. Finally, 11 of them were included, and 54 were excluded for not meeting the initial requirements proposed in PICO (Figure 1).

The 11 articles finally analyzed are shown in Table 2, providing information regarding the country of study, methodology used, instrument, population, and main conclusions of each study. It is worth noting that only 2 out of the 11 studies presented here are considered quantitative, as they deal with statistics from databases. The rest follow a qualitative methodology based on interview techniques, either open-ended or semi-structured, which allows for firsthand information from

Table 1

<table>
<thead>
<tr>
<th>Search Equations for WOS</th>
<th>Search Equations for Scopus</th>
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<tr>
<td>(TS=“unemployed people” OR sans-emploi OR “sans travail” OR “travailleur sans emploi” OR adult* OR personne sans emploi) AND TS=(VET OR “vocational education and training” OR “occupational training program” OR “Technical vocation and training” OR TVET OR “occupational training” OR FET OR “further education and training”) AND TS=“labour market” OR employment OR employ OR “employability skills” OR “competencias laborales” OR “job skills” OR “labor competences” OR “labor Competencies” OR “workplace skills” OR “working skills”)</td>
<td>TITLE-ABS-KEY (=( “vocational education training” OR “unemployed people” OR sans-emploi OR “sans travail” OR “travailleur sans emploi” OR adult* OR personne sans emploi) ) AND TITLE-ABS-KEY (=( vet OR “vocational education and training” OR “occupational training program” OR “Technical vocation and training” OR vet OR “occupational training” OR fet OR “further education and training”) ) AND TITLE-ABS-KEY =( (“labour market” OR employment OR employ OR “employability skills” OR “competencias laborales” OR “job skills” OR “labor skills” OR “labor competences” OR “labor Competencies” OR “workplace skills” OR “working skills”) ) AND (LIMIT-TO ( PUBYEARS, 2022) OR LIMIT-TO ( PUBYEARS, 2021) OR LIMIT-TO ( PUBYEARS, 2020) OR LIMIT-TO ( PUBYEARS, 2019) OR LIMIT-TO ( PUBYEARS, 2018) )</td>
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Note. VET: Vocational Education Training; TVET: Technical and Vocational Education Training.
the study population. Among these qualitative articles, we highlight the Program for the International Assessment of Adult Competencies (PIAAC) as the main source of data for two of the studies, enabling a comparison of international data on adult education and training.

If we analyze the articles regarding employability, it can be shown that studies 1, 6, and 7, conclude that vocational training programs provide a quick entry into the labor market. Additionally, we should highlight the inclusive potential these programs have for individuals with low academic levels, as they see them as an opportunity for access to employment (article 3). Articles 2 and 4 also emphasize the positive consideration of higher remuneration in more technical jobs obtained through completing a training program.

Regarding personal development, thanks to these vocational training programs, there is an increase in intrinsic motivation among participants (article 4), as well as the development of interpersonal skills (research 2). While it is true that personal effort is crucial for each participant, as indicated in research 7, students find supportive environments in these training contexts to achieve their goals, building networks that assist them in their personal and professional development.

Discussion

Professional training seems to be considered a fundamental and widely accepted system for entering or returning to the labor market (Desjardins, 2019), as well as for preventing unemployment among adults, especially younger individuals (Breen, 2005; Ebner, 2015; Eurofound, 2014). However, authors such as Maurer (2019) and Cooper et al. (2017) argue that despite the positive intentions and results achieved over time, adult vocational training fails to meet the expectations and desires of its users. This could be due to various reasons, such as the time it takes to find employment, the lack of acquisition of necessary tools or resources, or the limited improvement in professional skills based on the users' initial job situation.

Several authors highlight the positive aspect of acquiring competencies through vocational training (Iñiguez-Berrozpe, 2020; Landberg & Noack, 2022; Windisch, 2015). However, Chuan & Ibsen (2022) suggest that the learning obtained through vocational training quickly becomes obsolete, as users lack continuous learning ability and adaptability to changes in the labor market or job positions.
### Table 2

**Analysis of articles selected**

<table>
<thead>
<tr>
<th>Nº</th>
<th>Study</th>
<th>Population</th>
<th>Methodology</th>
<th>Instrument</th>
<th>Main Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Choi, S. J., Jeong, J. C., Kim, S. N., &amp; S. (2019). Impact of vocational education and training on adult skills and employment: An applied multi-level analysis</td>
<td>Adults aged 16-65 years in 2011</td>
<td>Cualitative</td>
<td>Program for the International Assessment of Adult Competencies (PIAAC)</td>
<td>Vocational Education Training graduates, henceforth VET, with lower literacy skills. They obtain employment more quickly, although this decreases with age</td>
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<td>3</td>
<td>Achatz, J., Jahn, K., &amp; Schels, B. (2022). On the non-standard routes: vocational training measures in the school-to-work transitions of lower-qualified youth in Germany</td>
<td>Graduates aged 21 years or younger who registered with the career guidance service (CC) in 2008</td>
<td>Cuantitative</td>
<td>Data generated by the career guidance procedures of the German Federal Employment Agency</td>
<td>Since incorporation into the labor market is not a linear process, pre-vocational training and labor market programs in combination constitute different complementary pathways that seem to normalize these school-to-work transitions for low-educated school leavers, although there is still variation in their integrative potential</td>
</tr>
<tr>
<td>4</td>
<td>Bratsberg, B, Nyen, T., &amp; Raaum, O. (2020). Economic returns to adult vocational qualifications</td>
<td>Adults aged 34-43 who at age 25 did not have a high school education</td>
<td>Cuantitative</td>
<td>Administrative records</td>
<td>Adult training helps to achieve higher remuneration. Obtaining certificates through training is more economically beneficial than experience-based training</td>
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<tr>
<td>5</td>
<td>Olmos, P., &amp; Mas, O. (2018). Young people's educational and employment profile in vocational initial programmes</td>
<td>16 academic tutors, 9 companies and 228 unemployed 16-21 year olds who left school prematurely</td>
<td>Cualitative</td>
<td>Non-structured interviews</td>
<td>The VET programs are the context where these young people find support to return to formal education and improve their life project planning and transition process</td>
</tr>
<tr>
<td>6</td>
<td>James, S., Seidel, F.A., Kilian, J., &amp; Trostmann, J. (2020). Labor Market Integration of Young Adult Refugees in Germany: Triangulating Perspectives Toward Program Development</td>
<td>Young adult participants in the model designed to prepare young adult refugees (YAR) to enter vocational education training</td>
<td>Cualitative</td>
<td>Semi-structured interviews</td>
<td>Preparatory programs help them to cope with the FPE/VET that will subsequently help them to achieve vital goals such as integration into the labor market</td>
</tr>
<tr>
<td>7</td>
<td>Löffgren, S., Iломáki, L., &amp; Toom, A. (2020). Employer views on upper-secondary vocational graduate competences</td>
<td>10 men representing interested local employers who were selected with the help of the VET provider</td>
<td>Cualitative</td>
<td>Interviews</td>
<td>The FPE creates the technical basis for incorporation into the labor market. However, to this must be added generic competencies such as motivation for work or interpersonal skills that must be provided by the students</td>
</tr>
<tr>
<td>8</td>
<td>Andersson, P., &amp; Muhrmann, K. (2022). Swedish Vocational Adult Education in the Wake of Marketisation</td>
<td>Adult education leaders from 20 municipalities</td>
<td>Cualitative</td>
<td>Semi-structured interviews</td>
<td>Apprenticeship training provides work experience and often leads to employment. However, low interest in apprenticeship training among students and difficulties in finding apprenticeships are examples of reasons why the number of apprenticeships is often very limited</td>
</tr>
<tr>
<td>10</td>
<td>Mara, L.-C., Cascon-Pereira, R., &amp; Brunet Icart, I. (2022). Perceptions of empowerment and motivation as outcomes of a continuing vocational education and training (CVET) programme for adults</td>
<td>281 participants in a VET program</td>
<td>Mixed</td>
<td>Survey</td>
<td>FPE/VET increases students’ motivation and empowers them towards achieving their career goals</td>
</tr>
<tr>
<td>11</td>
<td>Beka, A., &amp; Stublla, P. (2022). Comparing Public-Private Partnership of Vocational Education and Training Schools and Centres of Competence in Kosovo</td>
<td>Job center coordinators.</td>
<td>Mixed</td>
<td>Semi-structured interviews</td>
<td>It is necessary to adapt the theory to the real practices of the companies and the labor market. Student motivation is essential for the fulfillment of their duties during the internship. The internship tutors must be more committed and be a reference for the students. Continuous monitoring of students is necessary to achieve real objectives</td>
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</table>
Opinions on the integrative nature of vocational training for employment and its impact on the labor market vary. Some authors provide data suggesting that vocational training is an effective catalyst for entering employment after completing the training (Choi et al., 2021; James et al., 2020). However, other authors argue that this causality cannot be guaranteed (Achatz et al., 2022, Desjardins, 2019). These different perspectives may be influenced by factors such as age (Achatz et al., 2022), work motivation, interpersonal skills of the participants (Löfgren, 2020), or the opportunity to engage in professional internships during the training (Andersson & Muhrman, 2020). Therefore, the benefits of vocational training cannot be considered automatic, and further research is needed to ensure its positive impact (Desjardins, 2019).

Differences in the consideration of the adaptability of training actions to the labor market can be observed in the work of Köpsén (2020), who suggests the existence of different training models based on their orientation towards the labor market. The first model focuses on teaching skills (skill-based), while the second model focuses on teaching knowledge that enables individuals to perform specific jobs (knowledge-based). These differences in training content orientation are influenced by social, economic, and educational objectives (Wheelahan, 2015).

Studies on the wages obtained in jobs after vocational training indicate that certified beneficiaries tend to earn higher salaries compared to those who obtained their qualifications based on experience certification (Bratsberg, 2020; Chuan & Ibsen, 2022). However, intrinsic motivation of the users seems to be the main driving factor for choosing vocational training (Landberg & Noack, 2022). This motivation increases during the training period and is even considered as a pathway for planning one’s life and transition (Olmos & Mas, 2018). This is not surprising, considering the high percentage of young individuals or those without education among potential users.

While vocational training has shown effectiveness in preparing individuals for employment, it is important to acknowledge that various agents share the responsibility for its outcomes. This includes the users themselves, their interests, and motivations, as well as active employment and training policies implemented by governments, and the responsibility of entities and companies involved in providing vocational training to users of this system (Andersson & Muhrman, 2022; Bek & Stublia, 2022; Löfgren et al., 2020). Their participation should aim at improving the system and the human capital necessary for subsequent social development (Djibril et al., 2020). It is worth mentioning the perspective of Badunenko et al. (2020), who consider that the potential inefficiency of the system is largely influenced by the management of the training, considering it as a temporary inefficiency. This author emphasizes the importance of social interactions, both at a personal level and within the environment, as a key element in reducing this problem.

Conclusions

The Vocational Training System for adults, at the international level, is considered a system with great potential for impacting both social development and the professional profiles of its beneficiaries. However, it is acknowledged that there is still work to be done and improvements to be made in order to align the training actions with the reality of the labor market. The literature shows significant progress and a strong impact on individuals who participate in vocational training as a means to enhance their job-related skills. The fact that the analyzed works also express concern for the human dimension and the personal development of users through training offers an encouraging view of education, considering its impact beyond the economic implications of career improvement for beneficiaries, and emphasizing the human component of educational processes.

Contribution of the authors

Conceptualization: S.V.A, M.A.B.M.
Data Curation: S.V.A, M.A.B.M, C.M.Y.C.
Methodology: S.V.A, M.A.B.M.
Writing – original draft: S.V.A, M.A.B.M.

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Declaration of interests

The authors declare that there are no conflicts of interest.

Declaration of data availability

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

References


CEDEFOP. (2016). Improving career prospects for the low-educated. The role of guidance and lifelong learning (CEDEFOP, Research Paper no. 54). http://dx.doi.org/10.2801/794545


Deissinger, T., & Gonon P. (2016). Stakeholders in the German and Swiss Vocational Educational and Training System: Their role in innovating apprenticeships against the background of academisation. Education + Training, 58(6), 568-577. https://doi.org/10.1108/ET-02-2016-0034


INE. (2012). Nivel de formación por sexo y valor absoluto y porcentaje. https://www.ine.es/jaxi/Tabs/Tab/?n=42/p311a2002/0&file=01004 px&l=0

INE. (2022a). Migrantes de 16 y más años por nivel de formación alcanzado, sexo y valor absoluto y porcentaje. https://www.ine.es/jaxi/Tabs/Tab/?n=42/p311a2002/0&file=01004 px&l=0


