

## Fighting the Crisis with 4.0 Competences: Higher Education Projects in the Times of Pandemic

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**Abstract :** The outbreak of the global COVID-19 pandemic started the times of crisis full of uncertainty, especially in the field of transnational cooperation projects based on the international mobility of their participants. This is notably the case of Erasmus+ Program for higher education, which is the flagship European initiative boosting cooperation between educational institutions, businesses, and other actors, enabling students and staff mobility, as well as strategic partnerships between different parties. The aim of this abstract is to study whether competences 4.0 are able to empower Erasmus+ project leaders in sustaining their international cooperation in times of global crisis, widespread online learning, and common project disruption or cancellation. The concept of competences 4.0 emerged from the notion of the industry 4.0, and it relates to skills that are fundamental for the current labor market. For the aim of the study presented in this abstract, four main 4.0 competences were distinguished: digital, managerial, social, and cognitive competence. The hypothesis for the study stipulated that the above-mentioned highly-developed competences may act as a protective shield against the pandemic challenges in terms of projects' sustainability and continuation. The objective of the research was to assess to what extent individual competences are useful in managing projects in times of crisis. For this purpose, the study was conducted, involving, among others, 141 Polish higher education project leaders who were running their cooperation projects during the peak of the COVID-19 pandemic (Mar-Nov 2020). The research explored the self-perception of the above-mentioned competences among Erasmus+ project leaders and the contextual data regarding the sustainability of the projects. The quantitative character of data permitted validation of scales (Cronbach's Alfa measure), and the use of factor analysis made it possible to create a distinctive variable for each competence and its dimensions. Finally, logistic regression was used to examine the association of competences and other factors on project status. The study shows that the project leaders' competence profile attributed the highest score to digital competence (4.36 on the 1-5 scale). Slightly lower values were obtained for cognitive competence (3.96) and managerial competence (3.82). The lowest score was accorded to one specific dimension of social competence: adaptability and ability to manage stress (1.74), which proves that the pandemic was a real challenge which had to be faced by project coordinators. For higher education projects, 10% were suspended or prolonged because of the COVID-19 pandemic, whereas 90% were undisrupted (continued or already successfully finished). The quantitative analysis showed a positive relationship between the leaders' levels of competences and the projects status. In the case of all competences, the scores were higher for project leaders who finished projects successfully than for leaders who suspended or prolonged their projects. The research demonstrated that, in the demanding times of the COVID-19 pandemic, competences 4.0, to a certain extent, do play a significant role in the successful management of Erasmus+ projects. The implementation and sustainability of international educational projects, despite mobility and sanitary obstacles, depended, among other factors, on the level of leaders' competences.

**Keywords :** Competences 4.0, COVID-19 pandemic, Erasmus+ Program, international education, project sustainability

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