

ERASMUS+ PROJECT LEADERS' LEARNING POTENTIAL AS A SUSTAINABILITY FACILITATOR IN THE TIMES OF COVID-19 PANDEMIC

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Purpose: The aim of the article is to answer the question if Erasmus+ project leaders' organizational learning potential can support them in sustaining their transnational cooperation during turbulent and challenging times of the COVID-19 pandemic.

Design/methodology/approach: The research uses a composite index to define Erasmus+ project leaders' learning potential and seeks the relations between the results from this index and the sustainability of Erasmus+ projects. Additionally, predictive analysis in the form of logistic regression in relation to Erasmus+ project leaders' proactiveness, innovation and openness is carried out.

Findings: The obtained results prove that Erasmus+ project leaders' learning potential, their pro-activeness and the ability to adapt to new conditions facilitate the sustainability of Erasmus+ projects in the times of COVID-19 pandemic.

Research limitations/implications: The research is based on a large sample of Erasmus+ leaders but the researched group is very specific. The research sheds a new light on Erasmus+ projects' organizational potential.

Practical implications: The research proves useful for practitioners who manage European educational cooperation projects.

Social implications: The research proves the importance of learning potential within networks.

Originality/value: The discussion is placed in the broader context of relational and network approach to management of modern organizations. The discussion fills in a research gap in the research on organizational aspects of Erasmus+ projects.

Keywords: Erasmus+, project leaders, COVID-19, learning organizations, relational paradigm, network paradigm.

Category of the paper: Research paper.

1. Introduction and the context

The aim of the article is to answer the question if Erasmus+ project leaders' organizational learning potential can support them in sustaining their transnational cooperation during turbulent and challenging times of the COVID-19 pandemic. The research concentrates on the group of 990 Erasmus+ project leaders from Poland who realized their transnational cooperation projects in the times of the pandemic. The discussion takes into consideration the broader context of relational and network paradigms to management of modern organizations. Before concentrating on the clue of this research, namely: learning potential of Erasmus+ projects in the times of COVID-19 pandemic, two fundamental background issues have to be explained. The first one: why Erasmus+ projects are treated here as a researched target group and the second one: why the COVID-19 pandemic is a proper period of time for such a research. First of all, Erasmus+ projects, which are by their nature transnational innovative cooperation projects realized by schools, universities, NGOs and business sector, fulfil all criteria of being temporary organizations functioning within international networks. Having stated this, it is fully plausible to confront the nature of Erasmus+ projects with the characteristics of modern organizations as perceived from the point of view of relational and network paradigms in management. These characteristic features have been broadly discussed in the literature and they most often include the following elements: (i) horizontal relations between geographically dispersed partners forming different organizational units; (ii) communicating via information and communication technologies due to these geographic distances between partners; (iii) configuration of partners being an original combination of key competences that these partners contribute. And it is the last element, namely: the competences that make the organization or partnership stronger, more flexible and efficient than each individual partner. Additionally, this type of organization fosters the processes of adaptability to new conditions of the environment they exist in (Stead, J.G. and Stead, W.E., 2008; Woźniak-Sobczak, 2015). By no means do Erasmus+ projects perfectly match these features. Accordingly, the aspect of learning and adaptability potential is the main focus of this research. Furthermore, the research is placed in the context of COVID-19 pandemic which in this case constitutes specific training grounds to test the validity of main assumptions underlying the rationale for relational and network paradigms in management. According to vast literature on the subject, relational and network paradigms embodied in practice mainly by strategic management are a response to turbulent and unstable environments in which modern organizations function since relational and networking character give these organization a competitive advantage (Dyer, and Singh, 1998; Borgatti, and Foster, 2003; Czakon, 2011; 2012; Stańczyk-Hugiet, 2012; Woźniak-Sobczak, 2015). Thus, the relational and network approach to management postulates knowledge sharing within units of an organization and building relations in order to enhance competitive potential and effectiveness (Wieland, and Wallenburg, 2013; Szczepańska-

Woszczyzna, 2020). In the light of gaining a competitive advantage, other researchers also point out that access to information, expertise, and knowledge resources that could be difficult to obtain outside of the alliance of organizational units foster performance and innovation in different sorts of businesses and undertakings (Anand, and Khanna, 2000; Ilinitich, D'Aveni, and Lewin, 1996; Kale, Singh, and Perlmutter, 2000; Kogut, 2000; Kraatz, 1998; Oliver, 2001; Powell, Koput, and Smith-Doerr, 1996; Rindfleisch, and Moorman, 2001; Rosenkopf, and Nerkar, 2001; Zabolotniaia, Cheng, and Dacko-Pikiewicz, 2019). Consequently, the times of COVID-19 pandemic, when due to obvious reasons supply chains in production sector are broken and violated, are a proper period to check if organizational learning potential can protect institutions functioning in non-productive sectors of economy from disrupting and breaking up their cooperation.

Having explained the context and the rationale for the research in question, it must be also noted that the research described below consist of two main areas which have already been discussed and published separately within two individual research activities although based on the same data retrieved through vast survey carried out in 2021 among 990 Erasmus+ project leaders in Poland. The aim of this publication is to put these two researching threads together in order to get a broader picture of the phenomenon in question. This is especially important since bibliometric analysis shows that there are not currently any studies researching the links between Erasmus+ projects' sustainability and their learning potential in the times of COVID-19 pandemic. However, there is vast research and literature on how knowledge and innovation is generated within networks giving them a competitive advantage and strength, which will be referenced in the concluding part of this article.

2. Research methodology

The main research tool was a questionnaire consisting of 70 questions carried out during the period of COVID-19 pandemic and was responded by 990 Erasmus+ project leaders in Poland. The questions mainly focused on the assessment of respondents' digital, managerial, social and cognitive competences in relation to the sustainability of their projects, which was the primary goal of the research. However, the questionnaire also included questions with regard to Erasmus+ project leaders' motivation, engagement, experience, sex, age, institutional affiliation and to some of their projects' characteristic features such as budget and the number of project partners as contextual factors for this study. Accordingly, data collected also give the opportunity to make an additional analysis about the links between learning potential of Erasmus+ projects as organizations and their sustainability, which this article focuses on. The questions in the questionnaire fall into the following categories: (i) questions on the Likert's scale (from 1 to 5) – mainly concerning the assessment of Erasmus+ project leaders'

competences; (ii) contextual questions concerning the realization of projects and metric ones relating to age, sex, etc.; (iii) indicator questions – a set of questions defining one characteristic feature – in the case of this analysis it is a lifelong learning aspect as Erasmus+ project leaders' feature reflected in the composite indicator composed of a set of relevant questions in the questionnaire that is used here. **Yet, it must be noted at this stage that the research questionnaire is based on declarative replies of the respondents on how they perceive their own competences, which for obvious reasons constitutes a certain sort of limitation of the research in reference to its validity. However, since this is the first attempt to research on possible links between Erasmus+ project leaders' learning potential and the sustainability of their projects, such an approach is fully acceptable and plausible from the validity point of view.**

Consequently, as already mentioned, this research embraces two areas, namely: (1) analysis of lifelong learning potential of Erasmus+ project leaders in relation to their projects' sustainability in the times of COVID-19 pandemic including such elements as adaptability, proactiveness, or the development of human capital in its broad sense based on the study described in Poszytek (2021a), and (2) predictive analysis on the chances for sustaining or suspending Erasmus+ projects in the times of the pandemic carried out in the form of logistic regression in relation to Erasmus+ project leaders' proactiveness, innovation and openness based on the study described in Poszytek (2021b). Data analysis for both research areas was carried out with the use of Statistical Package of Social Sciences (SPSS). In the case of the former research area, the lifelong learning composite indicator was constructed with the use of individual indicators that are compiled into a single index. Such an index can measure multi-dimensional concepts, like the lifelong learning dimension in this case, that cannot be captured by a single indicator, or a variable (OECD, 2004). Accordingly, the lifelong learning composite index used here is a single combined measure constituted by separate, independent on one another and individual measures. In the case of the latter research area, apart from SPSS's functionalities, additional statistical tools, such as (1) U Mann-Whitney test to assess the significance of Erasmus+ project leaders' cognitive competences as a predictor and (2) the parameter $\text{Exp}(B)$ to calculate possible decrease of chances to suspend projects if cognitive competences of their leaders rose by one on Likert scale (1-5) were used. Full description of procedures and tools used for logistic regression can be found in Poszytek (2021b).

3. Results and discussion

As regards, the first area of research, Table 1 shows the scales used for individual variables constituting the lifelong learning index and it is followed by Table 2 presenting the obtained results in relation to Erasmus+ project leaders' ability to learn within an organization.

Table 1.*Lifelong learning index: Erasmus+ project leaders' learning potential*

Questionnaire item or question	Scale type	Index points (min)	Index points (max)
Every crisis situation can teach you something	Likert 1–5	1	5
I like to bring ideas to life	Likert 1–5	1	5
Implementing project activities during the pandemic allowed me to test myself in completely new circumstances	Likert 1–5	1	5
How important is it for you to introduce elements of interdisciplinarity or combining disciplines and fields when implementing a European project?	Likert 1–5	1	5
I like to explore new things	Likert 1–5	1	5
I analyse my failures and setbacks	Likert 1–5	1	5
I need to know all the pros and cons before making an important decision	Likert 1–5	1	5
I can apply innovative solutions in my work	Likert 1–5	1	5
Recognise areas for change that will help to better implement the project	Likert 1–5	1	5
Identify my own strengths and weaknesses	Likert 1–5	1	5
I am aware of my own strengths and weaknesses	Likert 1–5	1	5
In connection with the ongoing pandemic, are you familiar with the frequently changing regulations and recommendations concerning work and social functioning?	Likert 1–5	1	5
The pandemic period forced me to start using new tools/software	Likert 1–5	1	5
Please rate how up-to-date you are with modern ICT solutions that can be used in your work?	Likert 1–5	1	5
Have you participated in any training courses (class-based or online) on the use of modern technology in the last 6 months?	Binary 0–1	1	5
How often do you participate in training courses to improve competences used at work?	Binary 0–1	1	5
Due to the Covid-19 pandemic, did you attend any training courses that would be useful in carrying out your tasks as a project leader at these unusual times?	Binary 0–1	1	5
Have you conducted any training courses in the past year?	Binary 0–1	1	5
With regard to yourself, do you have a sense of continuous learning, or do you tend to rely on previously acquired knowledge and skills?	Binary 0–1	1	5
Do you have a planned path for your own development career?	Binary 0–1	1	5
TOTAL		20	100

Table 2.*Lifelong learning index: general statistics*

No. of respondents (N)		990
Mean		82.61
Minimum		61
Maximum		100
Percentile	25	78.00 (N = 232)
	50	83.00 (N = 485)
	75	88.00 (N = 273)

As Table 1 presents, the lifelong learning index values extend from 20 (min) to 100 (max) points. At the same time the higher the value of the index, the higher the level of Erasmus+ project leaders' learning potential. With the obtained standard deviation value of 7.415 as far as the distribution of results is concerned, the first percentile of worst lifelong learning performers and the third percentile of best lifelong learning performers are similar in numbers, namely: 232 for worst performers and 273 for best performers with lifelong learning index value of 78 and 88 points respectively. The lack of strong discrimination with regard to the

obtained results does not come as a surprise if one takes into consideration the fact that even within such a large sample of Erasmus+ project leaders, these leaders are a highly homogenous group by their nature. This, in turn, results from the fact that before getting European grants for their projects, they undergo a thorough scrutiny in reference to their capability to run innovative projects. In other words, it means that they must have certain features, qualities and competences highly developed including the ability to learn and adapt in case something goes wrong with their projects. Yet, still some differences can be observed and it enables further analysis connected directly with establishing the links between Erasmus+ project leader's learning potential and the sustainability of their projects in the times of the COVID-19 pandemic, which is presented in Table 3.

Table 3.

Projects' status in relation to Erasmus+ project leaders' lifelong learning index

Lifelong learning index (LLL Index)	Project status	N	%
LLL Index below 1st quartile – less than 78 points (<i>N</i> = 232)	Project finished or ongoing	161	69.4
	Project suspended or prolonged	71	30.6
LLL Index over 3rd quartile – more than 88 points (<i>N</i> = 273)	Project finished or ongoing	218	79.9
	Project suspended or prolonged	55	20.1

Table 3 shows that in the group of Erasmus+ project leaders with lowest lifelong learning index value, 30.6% of projects were suspended or prolonged whereas in the group of highest lifelong learning index value it was only 20.1%. This means that Erasmus+ project leaders with high learning potential suspended or prolonged their projects more seldomly in the period of COVID-19 pandemic.

The second research area dealt with predictive analysis on the chances for sustaining or suspending Erasmus+ projects in the times of the pandemic. It was carried out in the form of logistic regression in relation to Erasmus+ project leaders' proactiveness, innovation and openness. Additionally, this analysis was carried out in order to see if Erasmus+ project leaders' learning potential could possibly have any influence on their projects' sustainability. Consequently, the analysis at this stage sought possible observable relationships between a dependent binary variable meaning a successful continuation of a project or its suspension and an independent variable, which in this case are Erasmus+ project leaders' cognitive competences in their dimension of pro-activeness, innovation and openness to challenges. In practical terms it means checking by how many per cent the chances of project continuation or suspension decrease or increase if the value of Erasmus+ project leaders' cognitive competences increases by one – which in this case means reaching the value of 4,96 on the used Likert scale from 1 to 5. This value derives from the fact that the level of Erasmus+ project leaders' cognitive competences was established with the result of 3.96 as declared by the project leaders themselves in the questionnaire. Prior to this, the analysis at this stage was also based on the analysis of extracting factors and the analysis of the reliability of scales which in the case

of Erasmus+ cognitive competences reached the Cronbach's Alpha value of 0.77 meaning that the reliability of scale in this case is guaranteed (more details in: Poszytek, 2021b).

However, coming back to predictive analysis itself, first, non-parametric U Mann-Whitney test was used to assess the significance of Erasmus+ project leaders' cognitive competences as a predictor. The obtained result reached the value of 0.004. This means that Erasmus+ project leaders' cognitive competences in their dimension of pro-activeness, innovation and openness to challenges turned out to be significant since the significance value is below 0.05. Accordingly, the parameter Exp(B), the exponentiation of the coefficients that shows the odds ratios for a given predictor could be calculated and it reached the value of 0.628. This, in turn, means that the chances to suspend a project would decrease by 37% if the level of Erasmus+ project leaders' cognitive competences rose by one on the used Likert scale (1-5) reaching the value of 4.96 instead of the actual obtained average value of 3.96 mentioned above.

4. Conclusions

Obtained data and the subsequent analysis depicted above prove that organizational learning potential within Erasmus+ projects manifested by the activities and attitudes of their leaders is an influential factor contributing to the sustainability of Erasmus+ projects in the times of the COVID-19 pandemic. This also means that the obtained results already in the first area of this research demonstrate and are fully in line with the quoted assumptions of various research in the Introduction to this article, namely that functioning within relational and network mode of work, which is an evident case of Erasmus+ projects, fosters the organizational ability to learn. This also applies to the vice-versa situation meaning that turbulent and unstable conditions caused by the COVID-19 pandemic also motivate organizations and their leaders to learn in order to sustain their networks whose functioning was threatened by the pandemic causing possible communication and cooperation breakdowns and disruptions. Additionally, the second area of this research also demonstrates and the obtained results prove that the learning potential of Erasmus+ project leaders manifested by their cognitive competence in the dimension of pro-activeness, innovation and openness is also a considerable factor influencing the sustainability of Erasmus+ projects in the times of the COVID-19 pandemic.

To sum up, it must be stressed that the research in question proves that the demonstrated and proven level of the organizational learning potential within Erasmus+ projects constitute a specific set of antibodies that form a protective shield for these projects against ill effects of the COVID-19 pandemic. Thus, the research question if Erasmus+ project leaders' organizational learning potential can support them in sustaining their transnational cooperation during turbulent and challenging times of the COVID-19 pandemic has been answered positively. However, it is still worth adding that although the COVID-19 pandemic is

an unexpected event that has created extreme conditions for business, social, academic and educational activities and operations, already known and vastly researched concept of communities of practice with their learning potential finds its reflection here. Such communities – Erasmus+ projects in this case – give organizations a competitive advantage and resilience and for many researchers this phenomenon is manifested by the very need to learn and develop within networks which consist of partners who are usually homogenous as far as their beliefs, practices and attitudes are concerned (Brown, and Duguid, 1991; Rice, and Aydin, 1991; Lave, and Wenger, 1991; Rogers, 1995; Orr, 1996; Tyre, and von Hippel, 1997; Wenger, 1998; Friedkin, and Johnsen, 1999). By no means do Erasmus+ projects as organizations match this description and embody the phenomenon in question. The research presented in this article and its results are in line with these references and it demonstrates that learning potential within Erasmus+ networks give Erasmus+ projects strength and resilience. It also proves again, on the basis of a specific target group, the importance of this issue in the sciences of management and quality. And even if the target group used for this research is specific, this analysis can contribute significantly to the broader discussion in the field to see how various target groups in different professions tackle the challenges of organizational cooperation in the times of COVID-19 pandemic.

The results of this research should also prove useful to all practitioners in the field of European educational cooperation and contribute to the discussions on project management as such within a broader area of strategic management, **especially that this research made the first attempt to explore organizational aspects of Erasmus+ projects with the use of predictive statistical tools**. In the case of Erasmus+ Programme this discussion is relevant since as proved by Poszytek (2021b) there is a research gap in reference to managerial, organizational and sustainability aspects of the functioning of Erasmus+ projects. Accordingly, further longitudinal research is planned by the author of this article in this respect.

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