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research

Effective strategies that enhance the social impact of social sciences and humanities research

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Background: We are witnessing increasing demand from governments and society for all sciences to have relevant social impact and to show the returns they provide to society.

Aims and objectives: This paper reports strategies that promote social impact by Social Sciences and Humanities (SSH) research projects.

Methods: An in-depth analysis of six Social Sciences and Humanities research projects that achieved social impact was carried out to identify those strategies. For each case study, project documents were analysed and qualitative fieldwork was conducted with diverse agents, including researchers, stakeholders and end-users, with a communicative orientation.

Findings: The strategies that were identified as contributing to achieving social impact include a clear focus of the project on social impact and the definition of an active strategy for achieving it; a meaningful involvement of stakeholders and end-users throughout the project lifespan, including local organisations, underprivileged end-users, and policy makers who not only are recipients of knowledge generated by the research projects but participate in the co-creation of knowledge; coordination between projects' and stakeholders' activities; and dissemination activities that show useful evidence and are oriented toward creating space for public deliberation with a diverse public. **Discussion and conclusions:** The strategies identified can enhance the social impact of Social Sciences and Humanities research. Furthermore, gathering related data, such as collaboration with stakeholders, use of projects' findings and the effects of their implementation, could allow researchers to track the social impact of the projects and enhance the evaluation of research impact.

Key words SSH research • social impact of research • strategies • research evaluation

Key messages

- The social impact of SSH projects is amplified via a focus and an active strategy for achieving it.
- The social impact of SSH research is enhanced by meaningful involvement of stakeholders and end-users.
- Dissemination leading to social impact is evidence-based, useful, involves beneficiaries and allows debate.
- Tracking the social impact of projects could enhance the evaluation of the impact of research.

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Background

Government and society are increasingly demanding that all sciences demonstrate relevant social impact and benefit to society. In this context, scientists are increasingly encouraged to reach out to their communities, share their research and its impact on people's everyday lives, listen to communities and consider their research and future plans from the perspective of the people they serve. The March for Science that took place in April 2017 is an example of this social demand. The First Conference on Social Impact of Science SIS2016, celebrated in July 2016, is evidence of researchers' commitment to improving the social impact of their research. Social Sciences and Humanities (SSH) research has been challenged in this regard, and for this reason has been at risk of being eliminated from the European Commission's Horizon 2020 programme (Flecha et al, 2015). In response, it is necessary both to improve the mechanisms to evaluate the impact that SSH research is already achieving, taking into account the particularities of SSH with respect to other fields of research (Reale et al, 2018), and to identify and promote the use of effective strategies for enhancing the social impact of research, so that it can inform evidence-based policies and the actions of professionals, citizens, and civil society organisations.

In this context, the IMPACT-EV project 'Evaluating the impact and outcomes of EU SSH research' (FP7 2014–2017) focused on analysing the various impacts (scientific, political and social impacts) of SSH research, with the aim of providing a permanent system of indicators for its evaluation and contributing to enhancing the social impact of research. The literature review shows that there are different interpretations of the idea of social impact: from conceptions that include a broad spectrum of social impact areas (European Commission, 2005; Helming et al, 2011), to those focusing on a few items pertaining to the living conditions of people (for example, Godin and Doré, 2005), or limited to the economic impact (Weinberg et al, 2014); and from those referring to benefits at the individual level (for example, Godin and Doré, 2005), to those that refer to broader community-based phenomena (for example, Technopolis, 2009).

The distinctions between outputs: short-term results obtained immediately after the project implementation and clearly attributable to it; outcomes or results: changes produced as a mid-term result of the project; and impacts: improvements achieved in the long term, often after the life of the project, are well-established (European Commission, 2015). However, the diverse effects of research on different domains, such as the progress of science, effects on higher education students' learning, policy, innovation and dissemination of knowledge, have all been considered dimensions of social impact (see, for example, Rocha Lima and Wood, 2014). For this reason, and with the purpose of enhancing the evaluation and achievement of social impact, the IMPACT-EV project provided a definition of social impact and how it differs from other concepts. First, social impact is not the dissemination of results, which occurs when research findings are publicised, to the scientific community, policy makers, and stakeholders as well as to citizens in general (that is, the press, social media, and networks). Second, social impact is not knowledge transfer, when the published and disseminated results are taken up by policy makers and/or social actors as the basis for their policies and/or actions, regardless of whether they have evidence of social improvements. Finally, the social impact of research refers to the published and disseminated research results, which have been transferred, leading to an improvement in relation to the goals agreed on in our societies¹. In the case of European research, we take into consideration the EU Lisbon 2010 Strategy and the EU2020 Strategy (that is, employment, research and development (R&D) investment, climate change/ energy, poverty/social exclusion and education), which serve as a framework of those common social targets or objectives. At an international level, the UN Sustainable Development Goals are a main reference point. Other societal targets defined by societies could also be taken into account.

Experts and research funding agencies have devoted substantial efforts in recent years to identifying and measuring social impact. These efforts on impact assessment, which mainly include 'ex ante assessments' or 'ex post assessments' of the potential or achieved social impact of SSH research (Gibbons et al, 1994; Newby, 1994; Buxton et al, 2000; Holbrook and Frodeman, 2011; de Jong et al, 2011; United States Government Accountability Office, 2012; Bornmann, 2013), have made visible some challenges related to the assessment of such impact. These challenges include difficulties in establishing causality and the attribution of particular impacts to a given study (for example, van der Meulen and Rip 2000; Nightingale and Scott 2007; Gray et al, 2009: 139; de Jong et al, 2011; Spaapen and van Drooge, 2011; Bornmann, 2013; Penfield et al, 2014); the substantial time lapse between the publication of scientific results

and policy measures and social or behavioural changes that can be a consequence of those results (for example, Van der Meulen and Rip 2000: 13; Ruegg and Feller, 2003; Buxton, 2011; Morris et al, 2011; Spaapen and van Drooge, 2011); the fact that research is not always problem-focused (for example, Dibb and Quinn, 2010: 327; Holbrook and Frodeman 2011: 244); and the fact that research may have a positive or negative impact; and even the consideration of impact as positive or negative can change over time (Molas-Gallart and Tang, 2011). Recent developments have included citizens' voices in the social impact assessment by analysing the evidence of the potential or real social impact of research they share on social media (Pulido et al, 2018), and even identifying the relevance of global research goals to respond to citizens' needs and concerns (Cabré Olivé et al, 2017).

Besides efforts to evaluate social impact, the link between research and improved practice – that can eventually lead to enhanced social impact – has been the object of debate. The issue of co-creation of knowledge with practitioners and recipients of research results is one of the ongoing debates. The importance of building relationships that enable the exchange and collaborative production of knowledge, a 'what works' perspective to motivate practitioners engaging with academics, as well as allowing more open–ended opportunities for critical discussion and reflection, has been highlighted (Wilkinson et al, 2012).

Other studies focus on knowledge mobilisation, which has only occasionally been promoted by universities beyond the knowledge areas that can bring commercial benefits. Services or resources for knowledge mobilisation include research summaries, translations, research forums for knowledge exchange and opportunities for knowledge co-production. They are also a means to support evidence-informed practice, mediated by universities, that can enhance the impacts of SSH research (Phipps and Shapson, 2009).

While the difficulties of measuring social impact have been well defined, less has been said about effective strategies to achieve it. Actions related to knowledge co-creation, engaging citizens in research, transference, and making scientific knowledge available to people are being debated to promote evidence-based actions and policies. However, more evidence is necessary regarding the impacts that these and other strategies have on realising social improvement. Once these strategies are identified, they can serve to enhance the achievement of the social impact of research itself, but also the evaluation of potential social impacts beginning in the early stages of the research.

Methods

In this paper, we present one part of the results of the IMPACT-EV project, which responds to the objective of identifying effective strategies that promote social impact by SSH research projects. Six case studies were conducted on research projects identified as having successfully achieved social impact. Other case studies were conducted for projects selected as successful in achieving other types of impact (scientific, political or impact on strengthening the European Research Area (ERA)), and some of them achieved social impact as well. The case studies sought to analyse in depth these projects, their respective impacts, and the actions that led to those impacts.

Project selection

Project selection was based on the results of an ex post evaluation of the SSH 6th and 7th Framework Programmes. This evaluation analysed the various impacts achieved by the projects funded under these programmes. Taking into account the result of the ex post evaluation, a total of 14 projects were selected. They were identified as successful in achieving at least one of these impacts: social impact, political impact, scientific impact and impact on strengthening the ERA, and the respective case studies were conducted.

In order to measure the social impact of research, the IMPACT-EV consortium defined a set of criteria to assign weights to the different social impacts of a given research project. These criteria are as follows:

- Connection to United Nations Sustainable Development Goals, EU2020 targets or other similar official social targets.
- Amount of improvement compared to the initial situation.
- Replicability of the impact (the actions based on the project findings have been successfully implemented in more than one context).
- Social impact was published by scientific journals (with a recognised impact) or by governmental or nongovernmental official bodies.
- Sustainability (the impact achieved has been shown to be sustainable throughout time).

These criteria are used in the first Social Impact Open Repository (SIOR)², an open-access repository to display, cite and store the social impact of research results, launched as an initiative of the IMPACT-EV project. Social impact scores were assigned according to the evidence related to those criteria, and were used to select successful projects that realised social impact.

For the purpose of this paper, both the projects studied for their social impact and other projects studied for having achieved another type of impact, but that nonetheless also achieved social impact, have been taken into account.

The characteristics of these projects are summarised in Table 1.

Confidentiality was one of the key issues considered in the development of the case studies. In the analysis of success stories, the projects will be identified in accordance with the terms agreed upon with their main researchers. This agreement involves the anonymity of individual participants and the confidentiality of some information. In addition, all participants have acknowledged an informed consent in terms of their participation.

Data collection strategies

During the first stage of the data collection process (the ex post evaluation of SSH FP6 and FP7), data collection strategies used to obtain evidence on the projects' impact were interviews with principal investigators or project team members and with EC officers, an online questionnaire and exhaustive desk research on individual projects' reports, web pages, OpenAIRE and ORCID websites. Once the case studies were selected, additional data were collected. Our focus has been on understanding how the effective strategies have been implemented and have contributed to the social impact of research. Therefore, we adopted a mainly qualitative and comprehensive

Table 1: Projects analysed in the case studies

Project	Theme	Achieved Social Impact
Case 1: ALACs	Justice, fight against corruption	- Creation of new job positions
FP7 BSG-CSO (2009–2012)		- Increase in the number of civil complaints against acts of corruption
		- Citizenship engagement
		- Improvement of the CPI (Corruption Perception Index)
Case 2: DESAFIO FP7 CP-FP-SICA (2013–2015)	Water management systems	- Improving the quality of water management
		- Involvement of local communities in water management and systems
Case 3: INCLUD-ED FP6 IP (Prio.7) (2006–2011)	Education – poverty	- Increased academic achievement in schools that implement the successful actions accomplished in the project
		- Creation of employment in locations of extreme poverty
Case 4: MYPLACE FP7-CP-IP (2011–2015)	Youth and civic engagement	- Increase in the employability of young people
		- Youth engagement in politics
Case 5: TAP HERA I (2010–2013)	Archaeological discoveries	- Development of a Pilgrim Route and promotion of tourism as a result of the discoveries of historical sites
Case 6: ASSPRO FP7 CP-FP (2008–2013)	Patient payment policies	- Increased awareness of corruption

perspective, always based on a communicative orientation. The following data collection strategies were used:

Documentary analysis. The desk research involved the analysis of all the available documentation in relation to the project, including project reports, project publications, other project outputs (such as policy briefs or media coverage) and other reports and information produced by other actors or stakeholders involved.

Qualitative fieldwork. In-depth interviews and communicative daily life stories were conducted with researchers, policy makers, other stakeholders, and end-users to gather information about the strategies to achieve social impact. For each project, the first interview was held with the main researcher. In this interview, the first list of potential interviewees was agreed upon, and new interviewees were later incorporated following the suggestions of interviewees. A standard interview guide was written, and was adapted in each case according to the interviewee's profile and all the accumulated information for each case. Most of the interviews were conducted virtually, but some of them were face-to-face interviews or written responses, as requested by some of the stakeholders. A total of 62 people were interviewed, including 32 researchers, 23 stakeholders and 7 end-users.

Data analysis

For the qualitative data analysis, a system of categories was created inductively, emerging from the data, in a two-step process. First, for the interview transcripts

and documents of each case study, open coding was performed to identify relevant themes related to the process of achieving social impact. Then, these codes were compared across cases to detect similarities, and the themes identified were grouped across cases into general strategies that led to social impact, which conformed to the categories of analysis.

The process of data analysis was carried out on the basis of a communicative orientation (Gómez et al, 2019). This entails, on the one hand, analysing the data based on two main dimensions: the exclusionary components (those factors that prevented projects from having a greater social impact) and the transformative components (the factors that contributed to projects' social impact), with the aim of providing venues for improvement in the field of study. For the purpose of this paper, we will focus on the transformative components, which can identify the successful strategies that enabled social impact on the cases studied, and therefore could be used to enhance the social impact of other research projects.

Secondarily, the communicative orientation prompts researchers to identify those factors in dialogue and joint reflection with the persons interviewed. The analysis has been integrated into the data collection as, for every case study, joint reflection was present in each of the interviews conducted. Additionally, once the interviews were completed and a first version of the case study report was written, we sent the report to the main researcher to ask them for revisions and feedback in order to reach an agreement on the conclusions obtained from the case study. In some cases, after reading the case study report, the main researcher provided new documents to explore some issues in greater depth or suggested new contacts to interview.

Findings

The case studies made it possible to identify the strategies that have already been successful at enabling projects to achieve social impact. They can therefore be used by other projects to enhance their capacity to improve social reality. The main strategies are presented as follows.

Strategy 1: articulating from the beginning of a project the objective of realising social impact and a strategy to do so

Most of the projects that are successful in achieving social impact have an objective of realising a specific result, specifically providing an innovative improvement in a field. Therefore, these projects are explicitly oriented toward social impact from the start. The specific output derived from the projects can take different shapes: it can be a usable database, a methodology that can be standardised and applicable by other organisms, a criterion, and so on. In any case, it is a contribution looking for 'solutions' or a 'what works' approach that will play a part in improving a given situation. Furthermore, when outcomes created within the framework of a research investigation can be standardised and used by other agents who might adapt it to their own needs, other future social impacts can emerge.

This task involves a significant methodological and theoretical effort, and is therefore more likely to be achieved by a coordinated team of experts rather than a reduced team working at a national level, or a single researcher. That is the case of the transnational project MYPLACE (Memory, Youth, Political Legacy and Civic

Engagement), which includes research teams from 15 different countries across Europe, working together with local public institutions such as museums, art galleries and NGOs while considering the real needs of the community. MYPLACE sought to map the relationship between political heritage, current levels and forms of civic and political engagement of young people in Europe, and their potential receptivity to radical and populist political agendas. With this objective, it was foreseen that the project would achieve social impact and, with this purpose, they planned activities from the beginning in order to make social impact possible. Another clear example is the project DESAFIO (Democratisation of Water and Sanitation Governance by Means of Socio-Technical Innovation), which sought to eradicate inequalities in access to essential water and sanitation services in Latin American countries; the project from the beginning defined objectives in terms of impact.

Strategy 2: meaningful stakeholder involvement throughout the project lifespan

This is one of the most relevant strategies identified in all the case studies. High-quality participation of stakeholders entails listening to the stakeholders' recommendations about the object of study, taking them into account and channelling them into the project's outcomes. Stakeholders involved in successful projects have different profiles, which can vary depending on the topic of study. They can include policy makers, policy officers of the European Commission, end-users from NGOs, and representatives of the private sector who, among others, can provide different views on the topic.

The analysis of successful projects shows that the involvement of these stakeholders is necessary to realise impact. It means going beyond a mere dissemination of results, allowing the creation of real collaborations that include discussions to agree on the very content of the project and the co-creation of knowledge in the framework of the project; this can have social, political and scientific impacts (co-authored publications, standardisation of methodologies, and so on). Stakeholders' meaningful involvement from an early stage of the research process influences the attainment of the project's social impact. The more that external stakeholders participate in providing expertise or engaging in discussions related to the elaboration of the project content and outcomes, the more the results of the project can respond to the real needs of the affected collectives.

Depending on the profile of the stakeholders involved, this strategy has been implemented in different ways:

Involving policymakers who are concerned with the topic of the project and building alliances with them. This was a relevant strategy carried out in the ASSPRO project (Assessment of patient payment policies and projection of their efficiency, equity and quality effects. The case of Central and Eastern Europe), which aimed to identify a set of evidence-based criteria for the assessment of patient payment policies, and to develop a tool to analyse the efficiency, equity and quality effects of these policies. The project was initially aimed at influencing policy making. Therefore, the indicators generated by the project were discussed with policy makers, leading to the creation of alliances with some of them, who later used the evidence in their own policies. Finally, these political impacts turned into social impact: the creation of public debate about informal payments and greater awareness of corruption.

Collaborating with local stakeholders. In some cases, collaboration with local stakeholders, such as civil society organisations and cultural organisations, has led to increased activity

of these organisations and, in turn, the creation of employment in the geographical areas of influence or related activity sectors. This is the case for the TAP project (The Assembly Project - Meeting Places in Northern Europe), which was initially oriented to study historical patrimony, specifically the archaeological diversity of assembly and administration in north-western Europe. Finally, it contributed to the creation of several job positions related to the discovery of historical sites, although that was not its initial objective. A similar case is the ALACs (Advocacy and Legal Advice Centres) project, which sought to increase civil society participation around anti-corruption effectiveness. The collaboration with the ALACs of Transparency International (TI), the leading CSO against corruption, resulted in the creation of several job positions in the countries where new ALACs offices opened (Finland, Ireland, Hungary and Lithuania). Another example is MYPLACE, which achieved social impact because of the collaboration with museums. In this case, the communication between researchers and stakeholders allowed the latter to collect more information about the research, which contributed to the projects' social impact.

Including the most vulnerable end-users throughout the research lifespan. The genuine participation of community members, including representatives of NGOs and civic associations representing sectors of concern for the project, is critical to achieving social impact. For instance, in the DESAFIO project, community members were involved throughout the research project, providing relevant information for the project – both in terms of necessary background information and helping define the problems that had to be solved – and monitoring project development. In some cases, end-users of the research include underprivileged populations that have historically been excluded from research, and some projects have sought to engage them by going beyond traditional audiences. For instance, the INCLUD-ED project ('Strategies for inclusion and social cohesion in Europe from education') aimed to identify successful actions that contribute to overcoming social exclusion and poverty via education. The direct involvement of grassroots representatives of the Roma community in the INCLUD-ED project was essential for the successful implementation of many of its evidence-based recommendations in neighbourhoods with large populations of Roma people, who have traditionally been excluded from decision-making platforms. This contributed significantly to the social impact of INCLUD-ED (for example, creation of employment in an extremely poor neighbourhood).

Strategy 3: use of previous contact networks in order to build up collaborations

In some of the cases studied, the involvement of stakeholders in the project meant that project researchers activated and relied upon their previous networks of contacts related to the topic of research. Collaborations took different forms, such as discussing the topics of the project, inviting them to collaborate in the project's events, or making specific consultations. Furthermore, some characteristics of researchers' backgrounds are especially relevant to increasing the possibilities of developing such networks. These characteristics include credibility at the international level, sound expertise in the field, and having already achieved goals like achieving social impact and making a difference in society. An example in this regard is the case of the INCLUD-ED project. Its main researcher had already achieved social impact with his previous investigations at the national and international levels that were useful for the development of INCLUD-ED.

Furthermore, stakeholders contacted in INCLUD-ED were able to observe the 'social creations' developed as a result of research and tangible improvements achieved, which were a solid basis for subsequent research.

Strategy 4: coordination between the research activity and stakeholders' activity during the projects' duration

The involvement of stakeholders during the development of the project can be used to expand the uptake of the project findings, thus enhancing the project's social impact. This occurs in some cases when an interlinked and coordinated relationship between the research activities conducted within the framework of the project and the activities conducted by the communities of stakeholders engaged in the project lead to social impact, not just for the specific community of stakeholders involved but also for others, showing the replicability of the impact.

This was the case for the ALACs project, which was already planned in coordination with the organisation Transparency International. As scientific advancements occurred within the project, ALACs offices were opened in new countries as a result of the project's advancements. In addition, through assessing the needs of each specific geographical area regarding corruption, the services offered by the ALACs offices were not limited to assisting individuals, but they decided to extend the services to private companies. This was of major importance in Romania, where these companies also served as mechanisms to support integrity and to organise campaigns and public debates on corruption.

In the INCLUD-ED project, grassroots agents were engaged throughout the project with the clear objective of agreeing on how 'successful educational actions' could be recreated in different geographical settings. This attributed a prominent role to the grassroots agents for implementing these actions, while the sustainability of the project's outcomes beyond the project lifespan was ensured.

Strategy 5: dissemination activities showing useful evidence and promoting public debate

Although dissemination itself cannot be considered social impact, some types of dissemination activities do contribute toward advancing social impact. Successful impact depends on the way these activities are organised and implemented. Three conclusions that can be derived from the cases studied are: first, that impact depends on the foundation of research established in dissemination activities and on the evidence of previously achieved social impact; second, that dissemination activities make a difference when not only researchers but also beneficiaries explain specific content for the targeted audience; and third, when dissemination is conducted through the creation of spaces of public deliberation that allow a two-way conversation with the public, social impact is much more likely to occur.

In the case of the ASSPRO and ALACs projects, dissemination activities covered different channels and targeted different public audiences in different countries. The ASSPRO results were shared via forums of professionals' associations, but the results were also discussed on national TV, Facebook and an Internet news portal. The dissemination activities conducted through different channels allowed the findings of the project to appear in geographically distant areas and reach different public

audiences, such as virtual forums in Lithuania, discussions with members of assurance companies and medical associations in Hungary, a scientific debate in Vietnam, or a regular publication of articles regarding the health sector in Ukraine, among others. The dissemination strategies used in the ALACs project were also diverse in order to reach more end-users: awareness campaigns, use of the media, an online platform and a hotline (in Romania). In this case, although the dissemination efforts were shared between the ALACs project and the ALACs offices, which already existed before the project, the quality (research-based) of the assistance given was directly related to the project.

In the case of the MYPLACE project, the findings were used to inform stakeholders. For instance, they were used to providing training to social workers working with the youth in Hungary, based on scientific evidence. In this case, the Roma Press Center (the biggest organisation for Roma rights in Hungary) collaborated in the project dissemination through social media, made a film about Roma people's exclusion, published a book and organised conferences. A MYPLACE blog, the social networking site Twitter, and YouTube were used to disseminate the findings of the project. With the aim of achieving different audiences, MYPLACE also disseminated materials such as short documentary films with young people, and made contact with youth services and the city council.

As emphasised by many researchers, dissemination activities make a difference if they are conceived as spaces where researchers can learn from and listen to those who come from external institutions, who share concerns and bring about new ideas. In some cases, the topic might be complex and the lay public is therefore less familiar with them, or the non-expert public could be aware of the topic but not in great detail. In these cases, it is important to raise awareness about the social relevance of the topic of the project among all these different audiences and through different channels, providing, when necessary, specific data and numbers to explain the severity of the problem and to allow meaningful and useful debates.

Strategy 6: the achievement of political impact as a way to realise subsequent social impact

The analyses conducted in IMPACT-EV do not permit the articulation of a direct correspondence between political impact and social impact, as there are cases of excellent performance of political impact but with scarce achievements of direct social impact, which is expected to come as an indirect effect of the policies once implemented. However, it has been observed that in projects that have been very successful at achieving political impact at both the national and international levels, such examples of impact have enabled subsequent social impact. This is case of the ASSPRO project, mentioned above, which was initially oriented to obtain political impact and, once achieved, realised unexpected social impact as well.

Discussion and conclusions

In the present context, in which researchers are increasingly experiencing the need to demonstrate the social improvements enabled by their research, new proposals for the measurement and assessment of research impacts are emerging in different fields, including SSH (Klautzer et al, 2011; Adam et al, 2018; Edwards and Meagher,

2019). The case study approach has been used as a strategy that enables assessing and reporting the impact of research, although the pathways followed to transfer knowledge and achieve social impact are not always clear (Heyeres et al, 2019). In the context of the IMPACT-EV project, case studies were conducted that allowed, not only the analysis of projects in SSH that have been successful at achieving social impact, but also the identification of strategies used by the research teams to achieve these impacts, which could be used by other research teams to enhance the impact of their research projects.

Our analyses show that projects that are successful in achieving social impact develop different strategies that address different aspects and stages of the research process. Social impact can be enhanced from the beginning, in the project design and via the establishment of the research network; throughout the project, involving diverse and relevant stakeholders in the research process; and in the later stages of research, disseminating results in effective ways. Some cross-disciplinary issues can be identified in different strategies. First, research with social impact is collaborative; collaboration at different stages of the project and among different agents - within and outside academia – appears to be a necessary component of success in achieving social impact. Second, in accordance with previous research, involvement of research beneficiaries is not only important for the assessment of non-academic impacts (Meagher et al, 2008; Pulido et al, 2018), but it is also necessary to achieve impact (Newig et al, 2019). According to the analysis performed, a genuine participation of research beneficiaries that leads to social impact can be achieved, on the one hand, by involving them in the co-creation of knowledge, and on the other, by including them in the dissemination strategy to communicate the project results. Third, already achieved impact (scientific, political or social) of research teams can be a lever for subsequent social impact through different channels, such as facilitating building expert academic networks, generating social improvements stemming from the policies influenced, or increasing the probability that citizens utilise the research results when they are aware of social improvements already achieved.

Identifying these strategies has entailed a complex process of analysis that included a large amount of information, including quantitative and qualitative data and desk research, from the initial ex post evaluation of more than 500 projects funded under the 6th and 7th Framework Programmes, to the in-depth analysis of the projects selected for the case studies. The complexity of the development of the case studies also draws on the effort it has supposed – both for the IMPACT-EV consortium and for each project consortium – in terms of collecting new evidence and measuring the specific impacts for each case, as well as understanding in more detail how these projects do (or do not) make a relevant contribution to society. Taking into account the limitations of precise quantitative metrics to capture specific social impacts (Meagher et al, 2008), qualitative data collection and analysis has been particularly useful to achieve this understanding. In addition, because research teams were not always aware of their impact or had not systematised the evidence contributed to this challenge, the case studies have been useful for them to gain awareness of these issues. In this regard, the communicative methodology applied in the case studies has led to a dialogic process, from initial agreements to final feedback and reviews, that enabled an open discussion about the actual achieved impacts and how these were achieved, difficulties and potential improvements.

We argue that the conclusions of this study can enhance the social impact of SSH research projects insofar as the identified strategies are adopted by research teams and implemented in their research projects. We argue that this study can also contribute to the evaluation of research from the perspective of social impact. First, the implementation of the strategies identified can be used as a measure of the likelihood of projects' achievement of impact in ex ante or in itinere stages of a project's assessment. Second, gathering specific data related to these strategies could allow researchers to track the social impact of their projects, including collaborations established with stakeholders, data about the use of the projects' findings by stakeholders, and the effects of using these findings. Third, the dialogic feature of the process conducted in identifying and understanding the impacts and the strategies to achieve them entails a communicative evaluation of the social impact (CESI), an innovative approach to research evaluation.

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Research ethics statement

This research was approved and funded by the European Union's 7th Framework Programme. It entailed the evaluation and approval of the ethical procedures, which adhered to those defined by the EU's Charter of Fundamental Rights, the UNESCO Universal Declaration of Human Rights and the Declaration of Helsinki (WMA). For the development of the case studies, article 8 of the Charter of Fundamental Rights of the European Union about the protection of personal data and the Data Protection Directive 95/46/EC were followed. In accordance, confidentiality and anonymity of participants' identity was ensured, and all participants acknowledged an informed consent after being previously informed of the objectives, development and goal of the project and the use to be given to their personal data.

Contributor statement

RF was the main researcher of the project; he conceived the original idea and supervised the process. ED coordinated the development of the case studies. EA, CD, ED, SF, PH, SM, EO and ER contributed to the development of the case studies. ED and SM led the cross-case analysis. SM wrote a first draft with the support of EA and ED. EO and RF revised the manuscript. SM and ED wrote the final version of the manuscript, which was approved by the rest of the coauthors.

Conflict of interest

The authors declare that there is no conflict of interest.

Notes

- ¹ Flecha, R. 'Buenas prácticas: Cómo lograr impacto en los proyectos del Reto 6.' [Good practices: How to achieve impact in the projects of the Challenge 6], in *H2020: Informative session about Challenge 6*, ed. FECYT and European Commission. Bilbao: Universidad de Deusto (24 January 2014).
- ² http://sior.ub.edu/jspui/sior.jsp

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