Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

> *"The ability to perform innovation is dependent upon the way in which the relevant actors are organized. This becomes of particular importance when emphasis is on experience-based innovation, on the ability of the wider social context to support innovation, and on the need to create innovation that can meet the demand for social responsibility."*
>
> Bjørn Gustavsen (1938–2018)
> In "Social Innovation and Action Research" (2012)

This study explores whether social innovation may serve as a bridge between participatory policy trends and research traditions when striving for improved societal relevance and impact of research and innovation (R&I). Despite their shared aim of relevance and impact through civic involvement, European R&I policies and participatory action research approaches seldom refer to each other or harness each other's resources. The study advances the knowledge regarding how the participatory elements in the policies and research approaches relate through a participatory case study of a joint R&I process to develop a model for social innovation support in Sweden. The case study helps distinguish potential synergies between various degrees of involvement advocated in the policies and research approaches, as well as between the reliance on trending policy concepts vs. scientific notions of validity. Social innovation is perceived as a potential bridge between these elements, as it draws upon participatory academic traditions, while simultaneously tapping into current policy trends of co-creation, in the development of new approaches and solutions to societal challenges.

Introduction

Improved societal relevance and societal impact are increasingly called for in European Union (EU) policies on research and innovation (R&I) (European Union, 2014, 2016, 2017; Grimm et al., 2013). This is because R&I is seen as a key to tackling societal challenges and fulfilling the global goals of sustainable development in the 2030 Agenda (European Union, 2017). The EU policies argue that the fulfillment of such societal expectations on R&I requires cross-disciplinary, cross-sectorial, cross-institutional, and cross-border collaboration. Further, the EU policies contend that dialogue and active cooperation between science and society help achieve socially responsible R&I policies and processes that are also more relevant to citizens (European Union, 2014). Consequently, the EU policies advocate for co-creative approaches where researchers and societal stakeholders jointly develop new knowledge and solutions in various formats (European Union, 2017; Science Europe, 2017). In parallel to these policy trends, participatory action research has a long tradition of elaborating and validating methods, criteria, and ethics for joint knowledge production, with the dual aim of scientific and societal relevance and progress (Aagaard Nielsen & Svensson, 2006; Foote Whyte, 1991; Gunnarsson et al., 2015; Reason & Bradbury, 2008). By involving societal stakeholders – especially those being underprivileged in matters related to their lives and futures – in the whole research process from initiation to implementation, participatory action research aspires equal participation, empowerment, and emancipation.

Despite their shared aspirations of improved societal relevance and impact through science–society collaboration, the EU policy trends and the participatory action research approaches seldom refer to each other or harness each other's resources, in terms of methods,

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

strategies, legitimacy, etc. This raises questions of potential, underexploited synergies between the public legitimacy of the policy trends and the scientific legitimacy of the academic traditions that could improve their relevance and impact. The main aim of this study is thus to advance the knowledge regarding how the participatory elements in EU policies and participatory action research approaches relate in regard to how societal relevance and impact are achieved and ensured. A participatory case study helps distinguish this relation, focusing a joint process for developing a guiding model for social innovation support, involving Swedish innovation researchers, innovation promoters, and other innovation experts. As we will discuss in the article, the case's focus on social innovation reveals a potential bridge between policies and research by empowering stakeholders to foster new approaches and solutions to societal challenges (Anheier et al., 2019; Franz et al., 2012; Howaldt et al., 2018; Moulaert et al., 2013; Nicholls et al., 2015).

Participatory Policy Trends and Academic Traditions

In this section, the main participatory elements in the EU policy trends and the participatory action research approach are outlined, alongside an introduction to social innovation, as a springboard for the subsequent empirical analysis of how they relate in regard to societal relevance and impact.

Co-creation in European policies

Calls for improved societal relevance and societal impact in European R&I policies recurrently refer to policy concepts such as open science, open innovation, science with and for society (SwafS), and responsible research and innovation (RRI) (European Union, 2014, 2016, 2017; Science Europe, 2017; The Knowledge Coalition, 2016). Open science aspires toward more "reliable, efficient, and responsive" science, by making the scientific processes more open, inclusive, and interdisciplinary, with open access to both data and publications as well as collaborative interaction with societal stakeholders (European Union, 2016). Open innovation aspires toward new social and technological solutions to societal and industrial challenges through user involvement and cross-industrial/sectoral collaboration (European Union, 2016). Science with and for society envisions responsible and societally relevant research and innovation through dialogue and active cooperation between science and society (European Union, 2014). In order to "better align both the process and its outcomes with the values, needs and expectations of European society", responsible research and innovation advocates for the practical involvement of society, increased public access to scientific results, and considerations of ethical dimensions (European Union, 2014).

The policy concepts prescribe societal involvement in R&I processes, turning society into "a living laboratory for innovative solutions to the many challenges we face in Europe – be they economic, environmental or social" (European Union, 2017). In EU policies, these solutions are frequently referred to in terms of social innovation, defined as new ways to tackle the major societal challenges and of meeting social needs that are not adequately met by the market or the public sector (European Union, 2010, 2014, 2017; The Knowledge Coalition, 2016). The societal involvement in the development of such solutions will allow "all societal actors (researchers, citizens, policy makers, business, third sector organisations etc.) to work together during the whole research and innovation process" (European Union, 2014). The civil society – individual citizens and nonprofit organizations – is singled out as especially important to involve, allowing citizens to be producers of new insights and solutions, to create a demand for innovative results, and to have a say in what research and innovations that should be prioritized (European Union, 2016).

Four approaches to citizen involvement are delineated in the policy discourse: co-operation, collaboration, co-production, and co-design (Science Europe, 2017). Co-operation implies the lowest degree of involvement, where citizens passively give researchers access to data collection through their phones, computers, or other devices. Collaboration implies a more active contribution, where citizens assist in the collection of data demanded by researchers, for example through observations of flora, fauna, pollution, etc. Co-production allows citizen participation not only in the data collection but also in the analysis of the collected data. Co-design entails the most comprehensive involvement, allowing citizens to actively contribute to the agenda-setting, funding, design, implementation, and evaluation of R&I projects, programs, and policies. Co-design thus involves citizens in all R&I phases, from the selection of topics and challenges to address, to the planning and implementation of data collection and ideation, and further to the analysis, dissemination, and implementation of the results (European Union, 2016).

Various methods for citizen involvement are prescribed in relation to the mentioned policy concepts (European Union, 2014, 2016, 2017; Science Europe, 2017). A digital

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

"RRI Toolkit" (rri-tools.eu) provides over 100 methods for public engagement, including frameworks, science communication, joint reflection, multi-stakeholder dialogues, co-creative workshops, university–society partnerships, etc. Interactive exhibitions, digital and physical knowledge-sharing platforms, science cafés, and future workshops are also promoted (European Union, 2014). Laboratories represent a recurring format where researchers and societal stakeholders jointly explore and address scientifically and societally relevant topics in temporary or permanent settings (European Union, 2017; The Knowledge Coalition, 2016). One example is "innovation laboratories of change", where new ideas and concepts are piloted by all kinds of societal stakeholders, but especially "new actors of innovation and change" (European Union, 2017). Other examples are citizen labs and citizen observatories, where citizens help capture, evaluate, and communicate data in physical settings (European Union, 2016). Living labs, science shops, and open innovation platforms are other promoted formats where citizens, companies, public authorities, students, and researchers jointly generate new insights and innovations (European Union, 2014, 2016; The Knowledge Coalition, 2016). In relation to social innovation, living labs are perceived to both "contribute to social innovation and themselves represent a form of social innovation" (The Knowledge Coalition, 2016).

Participatory action research

Participatory action research aspires to the joint development of new insights and solutions by researchers and societal stakeholders, where academic and societal perspectives, relevance, and progress are aligned (Aagaard Nielsen & Svensson, 2006; Foote Whyte, 1991; Gunnarsson et al., 2015; Reason & Bradbury, 2008). Participatory action research provides participatory methodologies and arenas for "high-grade collaboration" with joint planning and execution of the whole research process – from problem formulation to research design, data collection, data analysis, result dissemination, and result implementation (Aagaard Nielsen & Svensson, 2006; Foote Whyte, 1991). It sets out to challenge the traditional expert–novice and observer–observed relationships between researchers and societal stakeholders by acknowledging the expertise and competences of both groups and enhancing equal participation in the development process (Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015; Reason & Bradbury, 2008). Empowerment and emancipation are thus crucial aspirations in participatory action research, especially in relation to underprivileged stakeholders in matters related to their lives and futures (Foote Whyte, 1991).

The wider area of action research, of which participatory action research is a part, has been described as "an orientation to (scientific) inquiry that seeks to create participative communities of inquiry in which qualities of engagement, curiosity and question are brought to bear on significant practical issues" (Reason & Bradbury, 2008). Its democratic agenda sets out "not only to achieve specific social improvements and reforms, but a more profound need to transform political culture, generally in society and specifically within science and research institutions and practices" (Gunnarsson et al., 2015). Action research is generally traced back to the American social psychologist Kurt Lewin, who in the late 1930s and onwards involved minority groups in social science knowledge production to counter exploitation and colonialism (Adelman, 1993). It has thereafter been further developed in various streams throughout the world – for example through participatory action research, pragmatic action research, emancipatory action research, community action research, etc. – with recurrent references to additional scholars such as John Dewey, Paulo Freire, and William Foote Whyte (Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015; Reason & Bradbury, 2008).

In order to specify the relationship between action research and participatory action research, a distinction can be made between doing research "on", "for", and "with" societal stakeholders (Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015). Research "on" implies a clear distinction between scientific and practical knowledge production, where the researcher acts as an expert observer, mainly aspiring for scientifically useful results. Action research – and subsequently participatory action research – were developed as a reaction to this approach, introducing research "for" and "with" that challenge the scientific–practical distinction, expert–novice relation and scope of beneficiaries. Research "for" – encompassed by action research – implies a blurred distinction between scientific and practical knowledge production, where the researcher still acts as an expert observer, but with a pronounced agenda to contribute to practical benefit for a particular group of people. Research "with" – encompassed by both action research and participatory action research – interweaves scientific and practical knowledge production by actively involving both researchers and stakeholders in the generation of scientifically and practically useful results.

Sharing an agenda of empowerment and emancipation among underprivileged stakeholders through joint development of new approaches and solutions to societal

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

challenges, social innovation is considered relevant for action research and participatory action research by an increasing number of scholars (e.g., Andersen & Bilfeldt, 2017; Estensoro, 2015; Gustavsen, 2012; Mazigo, 2017; Yang & Sung, 2016). Methods for practicing participatory action research include, for example, empowering dialogues, dialogue seminars/conferences, future creating workshops, and research circles (Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015; Reason & Bradbury, 2008). Participatory action research implies elaborated reflections on proper criteria for esteeming and ensuring the validity – the trustworthiness – of both process and results. It underlines the need for socially contextualized knowledge, where the intersection of academic and societal knowledge is meant to ensure a multifaceted scrutiny of methods and conclusions (Gibbons et al., 1994; Nowotny et al., 2001). This is expected to contribute to processual validity, with constantly evolving insights through the joint planning and execution in all phases (Aagaard Nielsen & Svensson, 2006). Pragmatic validity is also anticipated, as the socially contextualized knowledge development is meant to ensure that the process and results are relevant and useful in the particular context. These two validity criteria – pragmatic and processual validity – are in participatory action research aligned by the notion of democratic validity, which refers to engagement, empowerment, and emancipation of underprivileged stakeholders (Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015). These criteria and effects are not automatically fulfilled in participatory action research processes, however, since social structures and interactions are inherently complex.

Social innovation

Social innovation, in terms of new social solutions to societal challenges and other needs for social progress, has received increasing attention from researchers, policymakers, innovation promoters, and innovators during the last decade due to its perceived potential to empower stakeholders to foster new approaches and solutions to societal challenges (Anheier et al., 2019; Franz et al., 2012; Howaldt et al., 2018; Moulaert et al., 2013; Nicholls et al., 2015). Social innovations may take the form of new services, activities, methods, establishments, alliances, etc. intended to improve welfare, well-being, and quality of life, especially among groups who are disadvantaged or underrepresented in specific societal areas. In order to transform complex societal structures, social innovations need to create synergies between established institutions, regulations, and norms, on the one hand, and people's individual and collective capacity to change these structures, on the other. The desired transformation requires active involvement of those groups that are to benefit from the developed solutions, making both individual and collective empowerment a crucial component of social innovation.

Social innovation further requires multi-actor and multi-level mobilization, where public, private, and civil society actors interact on various organizational and geographical levels in order to match the complexity of the addressed societal challenges (Anheier et al., 2019; Franz et al., 2012; Howaldt et al., 2018; Moulaert et al., 2013; Nicholls et al., 2015). A mapping of 1000 social innovations across the globe reveals that public authorities and civil society organizations are most frequently involved, whereas private companies are somewhat less frequently involved (Howaldt et al., 2018). Researchers and other university officials are least frequently involved, since users and beneficiaries tend to replace them as knowledge providers in social innovation. Almost half of the mapped cases in that global study directly involve users or beneficiaries, in line with the empowerment ambitions of social innovation.

Research Design

A participatory case study of an R&I project in Sweden helps distinguish the relationship and potential synergies between EU R&I policies and participatory action research approaches. A single case study design has an esteemed potential to enhance multifaceted insights by combining various types of data, which has previously been proven fruitful when exploring new complex topics with multiple dimensions (Wiebe et al., 2010; Yin, 2009). Relevance is the most crucial criterion for case selection, rather than a random selection, which is why the study is based on a case that is esteemed as most likely to provide valuable insights into the relationship between participatory elements in EU policies and participatory action research approaches. The studied case is constituted by a process of joint development of a guiding model for social innovation support, involving Swedish innovation researchers, innovation promoters, and other innovation experts. The process was carried out as part of an R&I project that took place from 2016 to 2017 and was funded by Sweden's national innovation agency VINNOVA.

The process aspired to meet the unmet need of validated, practical tools for improving the support to innovations with high societal relevance and impact among Swedish innovation promoters, such as innovation offices, science parks, and incubators. This need had been

Bridging Participatory Policy Trends and Research Traditions through Social Innovation *Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist*

evoked by articulated demands from financiers, managers, and clients to broaden the innovation promoters' traditional focus on technological and industrial innovations to innovative solutions to current societal challenges and the United Nation's global sustainability goals (Lindberg, 2014, 2018). In order to enhance both societally relevant and scientifically valid results, a participatory action research approach was used in the process, where researchers and stakeholders were aspired to jointly develop new knowledge and solutions (cf. Aagaard Nielsen & Svensson, 2006; Foote Whyte, 1991; Gunnarsson et al., 2015; Reason & Bradbury, 2008). The process was coordinated by an innovation researcher from Luleå University of Technology and innovation experts from the consultancy agency Kontigo, who also jointly authored this article.

The involved stakeholders were representatives from Sweden's major innovation promoters, including the Swedish Network for Innovation and Technology Transfer Support (SNITTS), Swedish Incubators and Science Parks (SISP), Sweden's national hub for social innovation (Mötesplats Social Innovation), Sweden's national promoter of social businesses (Coompanion), and the Swedish Association of Local Authorities and Regions (Sveriges Kommuner och Landsting). Some of these (e.g., Coompanion and Mötesplats Social Innovation) were more experienced in supporting social innovation than others (e.g., SISP and SNITTS), which was seen as an opportunity for peer-to-peer learning. Additional researchers with expertise in innovation were also involved from Chalmers University of Technology and Halmstad University, as well as design experts from Geektown Kommunikationsbyrå, who designed the model. The stakeholder involvement was intended to ensure socially robust knowledge, where both the process and results are validated through continuous dialogue between those who possess various experiences and expertise in the studied area (cf. Nowotny et al., 2001). This implied simultaneous and intertwined development of the model and the study of its development, as common in participatory action research (cf. Aagaard Nielsen & Svensson, 2006; Gunnarsson et al., 2015; Reason & Bradbury, 2008).

The process took place during more than a full year, with chronological steps of joint planning of the process, mapping of pre-existing studies and models, outline of practically and scientifically validated model components, incremental design of a graphic model with these components, and dissemination of the model to innovation promoters in Sweden and internationally. The forms of engagement in these steps encompassed participatory dialogues at individual and collective meetings, workshops, and digital correspondence. The process was initiated through a series of initial meetings between the coordinating researcher and experts, and each of the involved innovation promoters and additional researchers, in order to plan the process and map their experiences of and approaches to social innovation support. Potential model components were thereafter delineated and validated through a series of meetings and workshops with all stakeholders. Based on this input, the model was incrementally designed and refined through a series of meetings and digital correspondence with all stakeholders. The finalized model was thereafter jointly disseminated through workshops and digital platforms.

Throughout this process, data was collected for this article by the coordinating researcher and experts in order to further intertwine scientific and societal progress. The process was documented through field notes, photographs, and PowerPoint presentations from meetings and workshops, as well as emails and model outlines from the digital correspondence. The collected data was analyzed in the light of previous studies on basic characteristics and logics of social innovation processes and support. A thematic analysis approach was used to distinguish the most pivotal components and mechanisms of such a model and how these were ranked and refined based on the participants' expertise and experiences (cf. Guest et al., 2012). In the analysis process, it was distinguished that the case's focus on social innovation introduces a potential bridge between policies and research, which will be further elaborated in the subsequent sections.

Results

As outlined above, participatory approaches to research and innovation are advocated both in EU policies and the participatory action research tradition. In these approaches, researchers and societal stakeholders jointly develop new knowledge and solutions for improved societal impact and relevance. A participatory approach was also prominent in this case study, which illustrates how innovation researchers, innovation promoters, and other innovation experts jointly developed a model for social innovation support (Figure 1).

Similar to the EU policies, the studied process was motivated by current societal challenges and the global sustainability goals in the 2030 Agenda, urging innovation promoters to widen their focus from technological and commercial innovations to social innovation, where

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

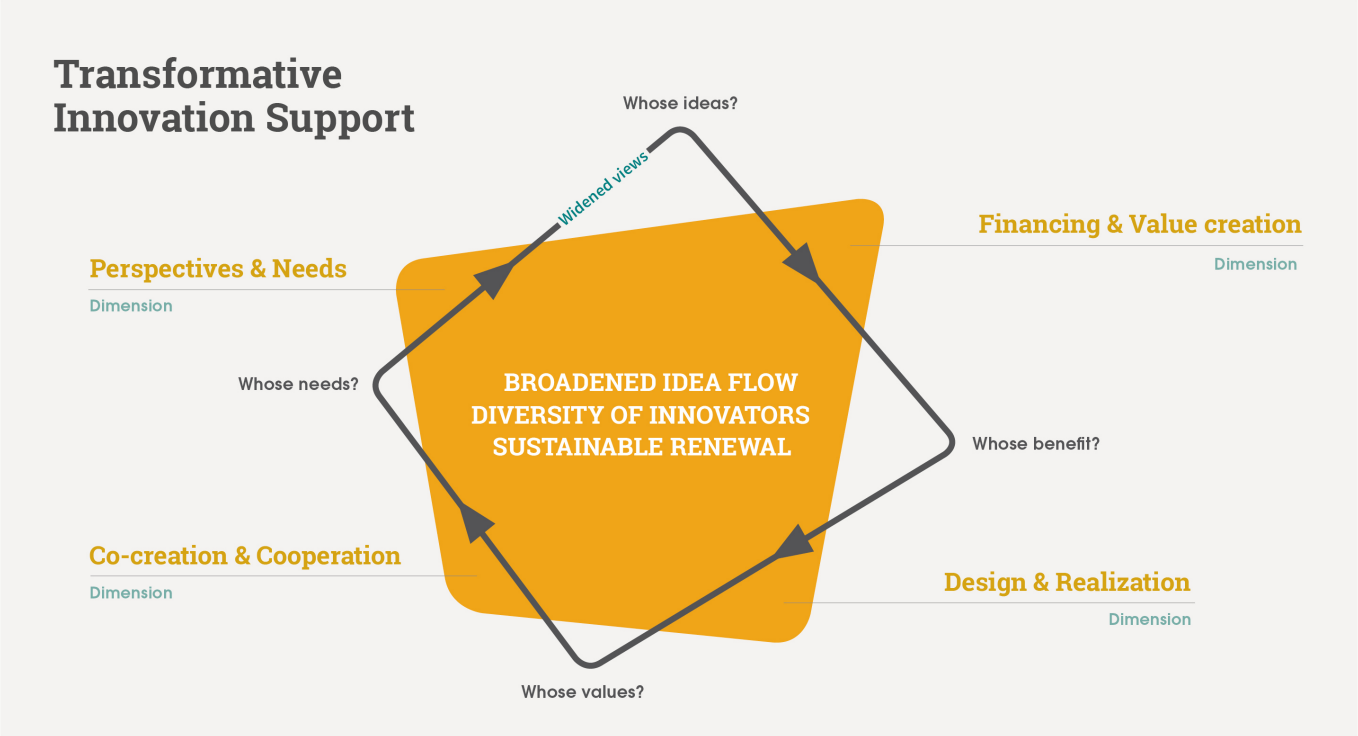

Figure 1. Model for social innovation support (see transformativeinnovation.se)

social improvement and social inclusion are essential. The case also reflects the fact that social innovation is increasingly referred to in participatory action research studies, as a way to open up R&I to societal stakeholders and concerns. As some of the involved innovation promoters were more experienced in social innovation support than others, their initial insights varied with respect to what kinds of issues that the process would address.

Degrees of involvement

In the EU policies, various degrees of citizen involvement are conceptualized in terms of cooperation, collaboration, co-production, and co-design, corresponding to the degrees of research "on", "for", and "with" according to the academic participatory action research tradition. In each tradition, co-design and research "with" refer to the most comprehensive involvement, aiming for active contribution of citizens to all phases of the R&I process from planning to implementation. This is reflected in the studied model development for social innovation support, involving stakeholders in joint planning, mapping, component outline, model design, and results dissemination. As the involvement in each step was designed and managed by the coordinating researcher and experts, their relationships to the stakeholders were, however, not fully equal. It was also difficult for the stakeholders to find the time for continuous engagement, in the midst of their primary work obligations.

Each step nevertheless implied a continuous dialogue between the researchers and stakeholders at meetings and workshops and during digital correspondence. In order to enhance stakeholder participation despite busy calendars, these engagement formats were more flexible and less formalized than those promoted in the EU policies and participatory action research approaches. They were rather organized in line with the most fundamental ambition of the participatory action research approach: to provide methodologies and arenas for high-grade collaboration. In regard to the EU policies, the process may nevertheless be understood as a type of living lab or open innovation platform, where stakeholders and researchers jointly generate new insights and innovations. This conclusion is further substantiated by the perception of living labs as both a generator and example of social innovation, as also focused in the studied case.

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

Reliance on policy concepts vs scientific notions

The reliance on various policy concepts – such as open science, open innovation, responsible research and innovation, and science with and for society – in the EU policies is matched by a reliance on scientific notions of socially contextualized knowledge and democratic validity in participatory action research. These policy concepts and scientific notions share the ambition to open up R&I processes to societal concerns and stakeholders. This is also reflected in the studied case, in its ambition to develop a model for supporting the realization of new solutions to societal challenges and other needs of social progress. The model was consequently named "Transformative Innovation Support" and highlighted three main incentives for supporting social innovation: Broadened inflow of ideas, Increased diversity of innovators, and Improved societal impact. It further delineated four specific dimensions to support: Perspectives and Needs, Co-creation and Collaboration, Design and Realization, Financing and Value Creation. It thereby encompassed a cross-cutting dimension of widened views, highlighting norm-critical queries regarding whose needs and perspectives are allowed to guide the development of innovations.

The model's transformative incentives and dimensions reflect the empowering agenda of social innovation, participatory action research, and EU policies, engaging in inquiries regarding how social and political conditions may be changed through cross-organizational and cross-sectoral interactions. This relates to the criterium of democratic validity applied in participatory action research, where the trustworthiness of the process and results is esteemed by its engagement and empowerment of underprivileged stakeholders, with constantly evolving, joint insights that are relevant and useful in the particular context. By acknowledging the expertise and competences not only among the involved innovation researchers and experts, but also among the innovation promoters – and indirectly among their target groups of social innovators and, in turn, their target groups of underprivileged people – the traditional expert–novice and observer–observed relationships between researchers and stakeholders were challenged. The coordinating role of the researcher and experts did, however, grant them major influence over the process management and model design.

The policy concepts promoted in the EU policies share this democratic agenda to open up R&I processes to societal concerns and stakeholders, but generally lack discussions on proper validity criteria for achieving and esteeming this in the participatory processes and results. They rather rely on more abstract notions of reliable, inclusive, and ethical R&I related to societal values, needs, and expectations. The academic participatory action research tradition may help substantiate and validate these notions through socially contextualized knowledge, ensuring a multifaceted, localized scrutiny of the process and results through intertwining academic and societal knowledge. In the studied model development, scientific and societal relevance and trustworthiness was correspondingly applied as a consistent criterion when selecting and formulating model components. This implied constant deliberations among the innovation promoters, researchers, and experts, regarding the relevance and validity of various components, where the coordinating researcher and experts nevertheless held the ultimate decision-making power. The innovation promoters who were less experienced in supporting social innovation expressed concerns over being too ambitious in regard to their established services, tailored to technological and industrial innovations. While the more experienced innovation promoters, as well as the innovation researchers and experts, advocated for a design with maximized transformative potential.

Discussion and Conclusions

In order to advance the knowledge regarding how the participatory elements in EU policies and participatory action research approaches relate in regard to how societal relevance and impact are achieved and ensured, the study has scrutinized evidence from policy documents, academic studies, and a case study of a Swedish participatory process of model development for social innovation support.

The results expose potential synergies between the various degrees of involvement highlighted in the EU policy approach to co-creation – cooperation, collaboration, co-production, and co-design – and the participatory action research tradition – research "on", "for", and "with". The degrees of co-design and research aspire to the most comprehensive involvement in each tradition, where citizens are expected to actively contribute to all phases of the R&I process and jointly develop new knowledge and solutions with researchers. This is also reflected in the studied model development, where stakeholders were actively involved in each step of planning, mapping, component outline, model design, and results dissemination, even if full equality was limited by the coordinating researcher's unilateral control over the process design and management. Less formalized co-creation methods were used

in the studied case than those promoted in the EU policies and the participatory action research tradition, rather organized in line with the most fundamental function of participatory action research – to provide methodologies and arenas for high-grade collaboration – as well as the living lab format highlighted in the EU policies, where various stakeholders jointly generate new insights and innovations.

The results further expose potential synergies between the reliance on policy concepts such as open science, open innovation, responsible research and innovation, and science with and for society in EU policies and the reliance on scientific notions of socially contextualized knowledge and democratic validity in participatory action research. The policy concepts and scientific notions address the same democratic agenda of opening up R&I processes to societal concerns and stakeholders, but the former generally lacks the latter's reflection on proper validity criteria for achieving this in the participatory processes and results. The focus on democratic validity and socially contextualized knowledge in participatory action research aspires a multifaceted, localized scrutiny of the process and results through intertwining academic and societal knowledge. This is reflected in the studied case's transformative incentives and dimensions, engaging researchers and societal stakeholders in continuous reflections on how excluding social and political conditions in innovation support may be changed.

The identified, untapped potential for improved synergies between the participatory elements in EU policies and participatory action research approaches seems to be bridged by the notion of social innovation. Generally understood as new ways to meet societal challenges and other needs of social progress – especially among disadvantaged and marginalized groups – social innovation is highlighted in the studied case, in EU policies, and in participatory action research studies. There, it serves to motivate and guide broad societal involvement, across societal sectors and groups – especially the civil society – through the entire R&I process from problem formulation to implemented solutions. It further helps establish and manage practical participatory formats, such as living labs, both as social innovations in themselves and as arenas for producing social innovations. The main bridging function of social innovation seems, however, to lie in its transformative mechanisms, which aspire to empower researchers and societal stakeholders to jointly challenge and change organizational and societal structures. This bridging function is most explicitly stated in the very name of the developed model for social innovation support: Transformative Innovation Support.

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

About the Authors

Malin Lindberg is a Professor at Luleå University of Technology, Sweden, where he specializes in participatory action research, in which knowledge is developed jointly by researchers and societal stakeholders. Her main topic of interest is inclusive forms of innovation and organization, with specific focus on social innovation, participatory innovation, and sustainable development. She has published several studies on policies, support, and management of inclusive innovation and organization in international anthologies and journals, for example, the *International Journal of Innovation Management,* the *International Journal of Innovation and Regional Development,* the *International Journal of Social Entrepreneurship and Innovation,* and the *European Public & Social Innovation Review.*

Daniel Hallencreutz is a Senior Consultant for WSP in Sweden. He specializes in participatory processes of regional development with a scholarly base in human geography. His main topic of interest is mechanisms of growth and societal change in clusters and innovation systems in various industrial and geographical contexts. His PhD thesis scrutinized growth patterns in Swedish clusters of design-intensive and cultural-products industries, such as multimedia, fashion, and music. He has managed several participatory evaluation processes of regional and national clusters and innovation systems, for example, in the European Regional Development Fund.

Anna Tengqvist is a Senior Consultant for WSP in Sweden. She specializes in participatory processes of social sustainability, equality management, and gender mainstreaming. One of her main topics of interest is social innovation development and support, and in this area she has managed several co-creative evaluations of multi-actor platforms and projects on regional level. She has also managed several participatory model development processes for gender equality, equal opportunities, intersectionality, and accessibility in the private, public, and nonprofit sectors. This work includes the development of a European standard for gender mainstreaming in the European Social Fund.

References

Aagaard Nielsen, K., & Svensson, L. (Eds.) 2006. *Action Research and Participatory Research.* Maastricht, Netherlands: Shaker Publishing.

Adelman, C. 1993. Kurt Lewin and the Origins of Action Research. *Educational Action Research,* 1(1): 7–24. https://doi.org/10.1080/0965079930010102

Andersen, J., & Bilfeldt, A. 2017. Transforming welfare Institutions through Social Innovation and Action Research in Denmark. *International Journal of Action Research,* 13(3): 201–220. https://doi.org/10.3224/ijar.v13i3.02

Anheier, H., Krlev, G., & Mildenberger, G. (Eds.) 2019. *Social Innovation – Comparative Perspectives.* New York: Routledge.

Estensoro, M. 2015. How Can Social Innovation be Facilitated? Experiences from an Action Research Process in a Local Network. *Systemic Practice & Action Research,* 28(6): 527–545. https://doi.org/10.1007/s11213-015-9347-2

European Union. 2017. *LAB – FAB – APP — Investing in the European Future We Want. Report of the Independent High Level Group on Maximising the Impact of EU Research & Innovation Programmes.* Brussels: European Commission.

European Union. 2016. *Open Innovation, Open Science, Open to the World – A Vision for Europe.* Brussels: European Commission.

European Union. 2014. *Science with and for Society. HORIZON 2020 Work Programme 2014-2015.* Brussels: European Commission.

European Union. 2010. *Europe 2020 Flagship Initiative Innovation Union.* Brussels: European Commission.

Foote Whyte, W. (Ed.) 1991. *Participatory Action Research.* Newbury Park, CA: SAGE. https://dx.doi.org/10.4135/9781412985383

Franz, H., Hochgerner, J., & Howaldt, J. (Eds.) 2012. *Challenge Social Innovation – Potentials for Business, Social Entrepreneurship, Welfare and Civil Society.* Berlin/Heidelberg: Springer.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies.* London: SAGE.

Grimm, R., Fox, C., Baines, S., & Albertson, K. 2013. Social Innovation, an Answer to Contemporary Societal Challenges? Locating the Concept in Theory and Practice. *Innovation: The European Journal of Social Sciences,* 26(4): 436–455. https://doi.org/10.1080/13511610.2013.848163

Gunnarsson, E., Hansen, H. P., Steen Nielsen, B., & Sriskandarajah, N. (Eds.) 2015. *Action Research for Democracy – New Ideas and Perspectives from Scandinavia.* New York: Routledge.

Gustavsen, B. 2012. Social Innovation and Action Research. In H. Franz, J. Hochgerner, & J. Howaldt (Eds.), *Challenge Social Innovation – Potentials for Business, Social Entrepreneurship, Welfare and Civil Society:* 353–366. Berlin/Heidelberg: Springer.

Howaldt, J., Kaletka, C., Schröder, A., & Zirngiebl, M. 2018. *Atlas of Social Innovation – New Practices for a Better Future.* Dortmund: Sozialforschungsstelle, TU Dortmund University.

Bridging Participatory Policy Trends and Research Traditions through Social Innovation

Malin Lindberg, Daniel Hallencreutz, and Anna Tengqvist

Lindberg, M. 2014. From Exclusion to Inclusion in Public Innovation Support? Innovative Practices in Bottom-Up Networks. *Scandinavian Journal of Public Administration,* 18(4): 91–107.

Lindberg, M. 2018. Relating Inclusiveness and Innovativeness in Inclusive Innovation. International *Journal of Innovation and Regional Development,* 8(2): 103–119.

Mazigo, A. F. 2017. Promoting Social Innovation through Action Research: Evidence from an Empirical Study in the Fisheries Sector of Ukerewe District in Tanzania. *Journal of Human Development and Capabilities,* 18(2):239–257. https://doi.org/10.1080/19452829.2016.1256276

Moulaert, F., MacCallum, D., Mehmood, A., & Hamdouch, A. (Eds.) 2013. *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research.* Cheltenham, UK: Edward Elgar.

Nicholls, A., Simon, J., & Gabriel, M. (Eds.) 2015. *New Frontiers in Social Innovation Research.* New York: Palgrave Macmillan.

Nowotny, H., Scott, P., & Gibbons, M. 2001. *Re-Thinking Science – Knowledge and the Public in an Age of Uncertainty.* Cambridge: Polity Press.

Reason, P., & Bradbury, H. (Eds.) 2008. *The Sage Handbook of Action Research. Participatory Inquiry and Practice.* London: SAGE Publications.

Science Europe. 2017. *The Rationales of Open Science: Digitalisation and Democratisation in Research.* Science Europe High-Level Workshop, September 14, 2017, Berlin.

The Knowledge Coalition. 2016. *Portfolio for Research and Innovation: Cooperation, Creativity, Game Changers.* Amsterdam: The Knowledge Coalition.

Yang, C-F., & Sung, T-J. 2016. Service Design for Social Innovation through Participatory Action Research. *International Journal of Design,* 10(1): 21–36.

Citation: Lindberg, M., Hallencreutz, D., & Tengqvist, A. 2019. Bridging Participatory Policy Trends and Research Traditions through Social Innovation. *Technology Innovation Management Review,* 9(4): 27–36. http://doi.org/10.22215/timreview/1231

Keywords: action research, co-creation, innovation, participatory research, social innovation

Technology Innovation Management Review

timreview.ca

Academic Affiliations and Funding Acknowledgements

Technology Innovation Management (TIM; timprogram.ca) is an international master's level program at Carleton University in Ottawa, Canada. It leads to a Master of Applied Science (M.A.Sc.) degree, a Master of Engineering (M.Eng.) degree, or a Master of Entrepreneurship (M.Ent.) degree. The objective of this program is to train aspiring entrepreneurs on creating wealth at the early stages of company or opportunity lifecycles.

- *The TIM Review is published in association with and receives partial funding from the TIM program.*