

Adopting a co-design approach to foster collaborative capacity and reflexivity in Social Prescribing. A Service Ecosystem Design perspective

Isabel Farina¹, Daniela Sangiorgi¹, Marcello Bertotti², Emanuele Torri³, Sonia Dias⁴, Maria J. Marques⁵, Regina Alves⁵

<u>isabel.farina@polimi.it</u>, <u>daniela.sangiorgi@polimi.it</u>, <u>m.bertotti@uel.ac.uk</u>, <u>emanuele.torri@apss.tn.it</u>, <u>sonia.dias@ensp.unl.pt</u>, <u>mj.marques@ensp.unl.pt</u>, <u>regina.alves@ensp.unl.pt</u>

¹Politecnico of Milan, Italy

²University of East London, United Kingdom

³Healthcare Trust of the Autonomous Province of Trento, APSS, Trento, Italy

⁴NOVA National School of Public Health, Public Health Research Centre, Comprehensive Health Research Center, CHRC, NOVA University Lisbon, Lisbon, Portugal

⁵NOVA National School of Public Health, Comprehensive Health Research Center, CHRC, NOVA University Lisbon, Lisbon, Portugal

Abstract

The article aims to explore potential areas of intervention by Service Design to enhance the non-clinical intervention called Social Prescribing (SP).

We propose the example of two co-design workshops delivered as training modules for a pilot study in Portugal and in Italy for young people defined as NEETs (Not in Education, Employment or Training) informed by a previous case study research based in the UK where SP is established. We would like to discuss the "collaborative capacity" role that design can play as it will support the future emergence of co-creative activities in the ecosystem generated by Social Prescribing. This paper is the first step of the exploration of the relevance of the contribution of novel conceptual frameworks evolving from Service Ecosystem Design.

This paper is part of a still ongoing research and we are discussing emerging questions that will guide further explorations on the topic, both theoretically and empirically.

Keywords: service ecosystem design, social prescribing, reflexivity, co-design.



Introduction

In the UK Social Prescribing (SP) has been developed as an intervention to address non-clinical needs that affect people's wellbeing and health. It is a type of community-based intervention whose primary aim is to postpone the use of medications and clinical approaches in favour of social solutions and community connectedness (Aughterson, 2020). The Social Prescribing Network (2016) defines Social Prescribing as "enabling healthcare professionals to refer patients to a link worker, to co-produce a non-clinical social prescription to improve their health and wellbeing". The intervention that has existed in the UK for more than 30 years is now gaining popularity in other countries (Morse et al. 2022) and receiving important investments from the UK National Health System (NHS) to become the forefront of the enhancement of the Personalised Integrated Care plan.

Beside this, a growing body of literature regarding SP is exploring the discussion around the operational dimension of the intervention. As mentioned by Fixen et al. (2020, p. 1): "Pertinent questions remain concerning the operation of local social prescribing schemes, including their ability to allocate resources to those who most need them and to ensure fair and meaningful participation of all stakeholders involved in the planning process, which traditional evaluation methods are unlikely to answer. With health and social care resourcing- both financial and human- at crisis level the ability of local social prescribing schemes to locate, recruit and activate lowagency clients, and to direct them toward suitable community-based activities and interventions in a sustainable manner, is crucial."

We are currently embracing this discussion by exploring novel approaches that can support the understanding of how Social Prescribing works and how to ensure resources activation and stakeholders participation, including young people and their community. We are doing this by exploring the potential contribution from the recent conceptualisations of Ecosystem in service research and service design, for which SP is an interesting field to investigate.

The article first resumes the current understanding of service ecosystems and service ecosystem design to then describe two co-design workshops developed and facilitated as part of the training modules for future Link Workers engaged in the EU project C.O.P.E. The EU project is currently piloting Social Prescribing as a means to enhance "relational proximity" communities to support young people defined as NEETs (Not in Education, Employment or Training) in Lisbon (Portugal) and Trento (Italy). An initial reflection on these co-design sessions is made to inform future research areas.



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Service Ecosystem

Service ecosystems are defined as "a relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange" (Lusch & Vargo, 2016. Pp. 10-11). At the core of the service ecosystem perspective there is mutual collaboration, a participative architecture, to create and recreate a supportive organisational logic to service exchange and value co-creation through resources integrations (Vargo, 2011). Value co-creation has been defined as "the benefit released from integration of resources through activities and interactions with collaborators in the customer network" (McColl-Kennedy et al., 2012, pg. 375). Resources are meant as "all tangible and intangible entities actors own, or have access to, that are used by them for purposes of resource integration" (Edvardsson, 2014; pg. 297). They acquire value depending on the context when integrated and re-adapted by the actors networked in the ecosystem. Resources integration is meant as "a process whereby actors combine and apply resources in pursuit of value creation" (Bruce et al. 2019, pg. 175). Resources are states of becoming and are based on actors' valuations of sense of resourceness or utility in context (Koskela-Houtari & Vargo, 2016). The way actors share, build and rebuild their resources define how value is co-created or codestructed (Peters, 2016). A key role is played by institutions, meaning rules, norms, symbols, meanings and institutional arrangements as sets of interrelated institutions (Akaka & Vargo, 2015; Koskela-Houtari, 2016). The rules embedded in the institutions involved shape the resource integration processes (Edvardsson et al. 2014). In this view actors' play also a role in influencing long-term change in service ecosystems. In the health fields, a care ecosystem is defined as a "dynamic and coevolving communities of diverse actors who create and capture new value through both collaboration and competition" (Kelly, 2015).

From this perspective, Service Design has been reconceptualized, defining Service Ecosystem Design as "the intentional shaping of institutional arrangements and their physical enactments by actor collectives through reflexivity and reformation to facilitate the emergence of desired value co-creation forms" (Vink et al. 2021. Pp. 169). In other words, service design creates the conditions for all the actors involved in the service ecosystem to intentionally influence and evolve their service ecosystem for the emergence of desired value co-creation forms.

Social Prescribing has not been investigated yet by applying service ecosystem lenses, but we believe that this would benefit the current literature as it would highlight the interactions by which value is co-created in the service ecosystem and the dynamics by which resources can be integrated.



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The aim of this paper is to explore the role that co-design can have in supporting collaborative capacity and reflexivity of SP actors to identify resources, challenge existing social structures, integrate and develop the necessary conditions to nudge an ecosystem of care for NEET's wellbeing.

Designing for collaborative capacity

The two workshops we are using as example are part of the EU project C.O.P.E.: a pilot study involving Lisbon (Portugal) and Trento (Italy) with "the aim to innovate and strengthen interventions to contrast vulnerabilities of young people Not in Employment, Education or Training (NEET), requiring complex and coordinated, inter-sectoral interventions, facing the greatest barriers to social and labour market integration". C.O.P.E. proposes a holistic and innovative person-centred intervention for NEETs to access support through the concept of "relational proximity". The notion of "relational proximity" is characterised by "an emphasis on the organisational, individual and social assets that can be activated through the concerted effort of a wide range of stakeholders and put into practice by the relationship between the link worker and the young NEET" 10.

Through the partnership of seven partners from Croatia, Italy, Portugal and United Kingdom, including all the relevant stakeholders concerned by the action targeted, the project will train 15 Link Workers to be employed in a pilot study in Lisbon and Trento.

We have delivered two remote codesign workshops with members from Lisbon and Trento: the first, entitled "Co-design approach for community assets mapping" held the 25th of May 2022, and the second "Social Prescribing system co-design" held the 29th of June 2022. The workshops have been informed by a previous case study research focusing on the role of Link Workers in an organisation (Sheffield Futures) in the UK, delivering SP for young people aged 13-24 years old in the city of Sheffield. The research is still work in progress and will be further developed through field research involving stakeholders, Link Workers and those defined NEETs entering the pilot study in Trento, in the period between May and July 2023.

¹⁰ From the Project description



⁹ From the Project description



The training workshops

As mentioned before, the research was informed by a previous case study research whose aim was to understand the evolving role of LW in the context of SP for young people aged 13-24 years old. By looking to a single organisation, Sheffield Futures that is at the forefront in this evolution of SP (originally SP was born to respond to the social needs of lonely, isolated and chronic ill elderlies in the UK), we have been able to explore how SP intervention works, how it has been reformed and the strategies adopted by LW to co-produce the intervention with young people. This research has informed the tools and aims developed for the specific workshops delivered in the training module in the EU project C.O.P.E. The training module was aimed to prepare selected actors from Lisbon and Trento to become Link Workers for the pilot study.

The first workshop, called "Co-design approach for community assets mapping", was a four hours session facilitated remotely for 74 participants from Lisbon and Trento. Among the participants, some were future Link Workers currently working in organisations of the third sector with different backgrounds from education, social work and nursing; the others were relevant stakeholders mainly from the primary mental health sector, work agencies and universities. Participants were divided into 7 groups considering similar territorial locations but with a mix of different roles. The workshop's aim was to allow participants to familiarise with co-design knowledge and approaches to support the understanding of needs and resources from NEETs and the community and to co-develop the social prescribing service system. Through 3 activities, participants were invited to identify local resources for the creation of local networks and speculate about engagement scenarios with NEETs.

The second workshop, called "Social Prescribing system co-design", was a six hours session with the same participants and groups of the previous workshop. Through 3 activities, participants were invited to map the service ecosystem and through a service simulation reflect on potential challenges and pitfalls.

Our approach was based on the idea that care ecosystems cannot be designed but only developed (Sels & Van Hootegem, 2019). But design can play a fundamental role through the *designing* - meant as the iterative and continuous process applicable to wicked problems - of the elements that determine the context in which multiple actors co-produce care (Mohr & Desserts, 2019). In this sense designers with the engagement of the actors on different levels can create the conditions for co-exploration and understanding of the different needs, opportunities, aspirations or strengths that exist in the ecosystem. This is called "collaborative capacity" (Sels & Van Hootegem, 2019). Pilot studies are the perfect environment in which this



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collaborative capacity can be facilitated by design, as it will support the future emergence of co-creative activities in the ecosystem.

Mapping and recognizing resources

During the first workshop groups were invited to identify local resources according to NEETs potential interests. This activity was informed by a tool created by Link Workers in the organisation of Sheffield Futures: in their initial meeting with young people Link Workers provide a list of activities available in the community and divided in 6 groups (socialising activities, creative activities, sport, indoor activities, self-care, work/voluntary work/training). For each activity listed, Link Workers had to make sure to have identified existing realities delivering the activities in the city according to specific criteria (costs, travel distance, targeted age). We provided the same categories without identifying specific activities. Participants at the workshop were therefore invited to make assumptions regarding activities of interest for NEETs and identify acknowledged organisations providing them in their area [Figure 1].

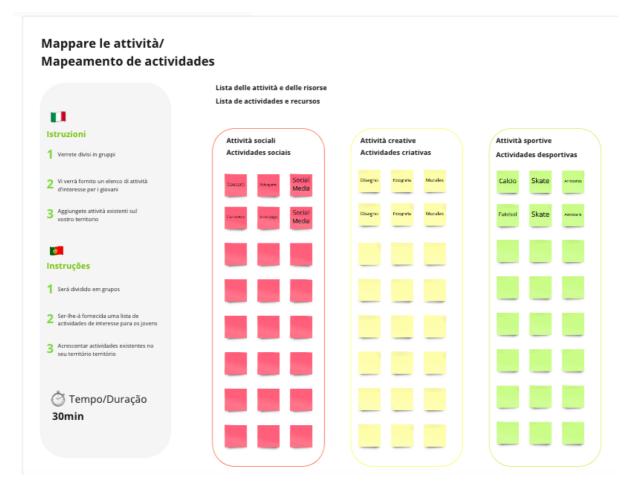


Figure 1. Mapping resources activity template



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They had to reflect about important information and identify possible gaps regarding their knowledge of local assets. Specifically they had to reflect on what they need to know more about their community, which kind of barriers they perceive in accessing community assets and what they need as a resource and from whom to create a network that can support their work.

The first activity of the second workshop aimed to visualise an ecosystem map to facilitate participants' understanding of their community assets and the interactions and exchange of resources [Figure 2].



Figure 2. Ecosystem map

Our underlying idea on this activity was the fact of understanding resources as something that is contextual and becoming (Edvardsson et al., 2014; Vargo & Lusch, 2004). Even if we were inspired by the methods developed by Link Workers from Sheffield Futures, our intention was to identify the contextual elements that were shaping the resources that were identified by each participant. Based on their own beliefs, values, background and experiences each of them were recognizing different potential resources or even their absence in their local community. As participants were all from different backgrounds and roles, they could share different perspectives and experience and re-frame the resources but also collaborate in integrating resources and therefore co-create value among each group. As the activity was inspired by a tool used in the co-productive process between Link Workers and



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young people, our aim was to explore with participants the possibility of recognizing also young NEETs as resources (Gummesson et al., 2019; Frow, McColl-Kennedy & Payne, 2016).

Reflecting on stereotypes

In the second activity of the first workshop we provided three archetypes of NEETs based on the existing literature. The three archetypes were describing three stories of the challenges faced by young people not in education, employment or training. Participants had time to reflect on those stories, discussing their experience with similar profiles to reflect on their preconceptions on the definition of NEETs. They had finally to reflect on the challenges and needs that emerge from the stories but also identify existing resources that may not be visible for the NEET person [Figure 3].

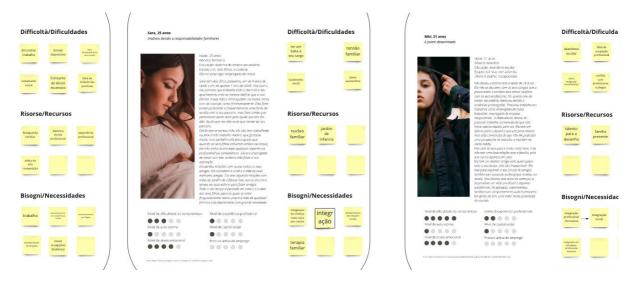


Figure 3. Two of the archetypes reflecting on young NEETs

As NEETs were not present at the workshop and participants reflected on archetypes based on the literature, we asked them to identify real people relevant for the intervention, and conduct an interview to enrich the understanding of those identifying a social need (referralists), NEET people or those providing local resources to connect the person with the community. This homework was relevant to inform the second workshop. We received 13 interviews with potential referralist experienced with the NEET category and 8 interviews with people that could be identified as NEET.





Based on their understanding from the archetypes and the interviews, participants could develop a speculative journey map of the future intervention and simulate it through role playing [Figure 4].

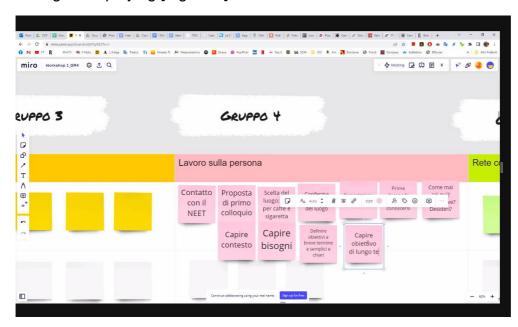


Figure 4. Journey map and role playing activity

This activity showed during the workshop different mental models and social structures internalised that were representing young NEETS (often stereotyped). Words as "lazy", "bored", "spoiled", "de-motivated" were minimising the multidimensional characterisation of young people that do not work or study that are actually experiencing intergenerational difficulties, psychopathological symptoms, domestic, social and economic difficulties, social isolation, reduced access to community services and cultural exclusion, crime/violence concerns and substance abuse. But institutionalised social structures were also emerging, especially in the play role, in the way other roles and care paths (for example social work or mental health practitioners) assumed a paternalistic interaction with young people. Which is one of the major barriers in help-seeking from young people and the major element that characterised unfriendly medical services. Through a corporal reflexivity process (Vink & Koskela-Houtari, 2021) participants could develop their awareness on their future role as Link Workers and the need to transform the support system for young NEETs.



Young people participation

The biggest gap in the workshops was the lack of young NEETs voices. We tried to solve this by inviting participants to interview some and share their experience. We understood the importance of not substituting them through archetypes built upon existing literature or common stereotypes. Therefore we nudged participants to directly get in contact with young NEETs and have first-person perspectives. But we also recognize that this was not sufficient. The workshops activities were a first step to build individual and collective reflexivity in the future Link Workers in the pilot study. We also simulated co-creative tools that could be used in the co-productive relationship between them and young NEETs. Questions as to which resources young people identify, or which resources and needs are their own, or how they can be engaged, remain still unknown.

Discussion

At this phase service design tools and approaches were used as training tools to support Link Workers in challenging their positions and perspectives regarding their local communities, NEET people, avoiding stereotypes and assuming an opening and sharing attitude while imagining the future of their roles. We provided participants with an understanding of co-design approaches and systemic thinking to nudge their collaborative capability.

In the following phases of the C.O.P.E. project we will explore the unsolved questions and identify with all the relevant actors (young NEETs, Link Workers, Stakeholders) further areas of intervention for Service Design.

As Social Prescribing is gaining popularity also outside the UK, there is an urgent need to identify common patterns of design and implementation of the intervention across models and countries to support the evidence regarding its implication on the micro-level, meaning identifying for whom this intervention is more suitable, and on a macro-level, meaning identifying how the intervention can transform current health and social ecosystems (Husk et al. 2021). In this case Service Design could support the transition of Social Prescribing from the UK context to the Italian and Portuguese ones, where the pilot study is taking place.



Acknowledgments

This paper is an output from the project 'C.O.P.E - Capabilities, Opportunities, Places and Engagement: Approach for Social Inclusion of Difficult to Reach Young People through a "Relational Proximity" Community Network'. The COPE project is supported by the European Commission under EaSI - European Programme for Employment and Social Innovation) (VP/2020/003/0201). The COPE project brings together a team of health (public health and mental health) and social care professionals/managers, university teachers/researchers, social entrepreneurs, coaches and trainers with specific expertise in social innovation from: Provincia Autonoma di Trento (Italy), Federazione Trentina della Cooperazione (Italy), Co.ge.s. Don Lorenzo Milani Società Cooperativa Sociale (Italy), Public Health School from NOVA University Lisbon (Portugal), SHINE 2Europe, Lda (Portugal), University of East London (United Kingdom) and Europska zaklada za filantropiju i društveni razvoj (Croatia). The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions, or policies of the funding bodies or institutions with which they are affiliated.

References

- Akaka A. M. & Vargo S.L. (2015) Extending the context of service: from encounters to ecosystems. Journal of Services Marketing 453–462
- Aughterson, H. Baxter, L. and Fancourt, D. (2020). Social prescribing for individuals with mental health problems: A qualitative study of barriers and enablers experienced by general practitioners. *BMC Family Practice.*, 21: 194.
- Edvardsson, B., Kleinaltenkamp, M., Tronvoll, B., McHugh, P., & Windahl, C. (2014). Institutional logics matter when coordinating resource integration. Marketing Theory, 14(3), 291–309.
- Fixsen, A., Seers, H., Polley, M. et al. (2020) Applying critical systems thinking to social prescribing: a relational model of stakeholder "buy-in". BMC Health Serv Res 20, 580
- Frow, P., McColl-Kennedy, J. R., & Payne, A. (2016). Co-creation practices: Their role in shaping a health care ecosystem. Industrial Marketing Management, 56, 24-39.



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- Gummesson, E., Mele, C., & Polese, F. (2019). Complexity and viability in service ecosystems. Marketing theory, 19(1), 3-7.
- Husk et. Al. (2020) What approaches to social prescribing work, for whom, and in what circumstances? A realist review. Health Soc Care Community; 28: 309–324
- Koskela-Huotari & Vargo, (2016) Institutions as resource context, Journal of Service Theory and Practice, Vol. 26 Iss 2 pp. 163 - 178
- McColl-Kennedy et al. (2012), "Health care customer value cocreation practice styles", Journal of Service Research, Vol. 15 No. 4, pp. 370-389
- Morse DF, Sandhu S, Mulligan K, et al. (2022) Global developments in social prescribing BMJ Global Health, 7:e008524.
- Peters, H. Löbler, R.J. Brodie, C.F.Breidbach, L.D. Hollebeek, S.D. Smith, ..., R.J.Varey (2014) Theorising about resource integration through service-dominant logic Marketing Theory, 14 (3) (2014), pp. 249-268
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68(1), 1–17.
- Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. Journal of the Academy of Marketing Science, 44(4), 5–23
- Vink, J., & Koskela-Huotari, K. (2021). Building reflexivity using service design methods. Journal of Service Research, Journal of Service Research, 25:3