Co-production before, during, and after the first COVID-19 lockdown: The case of developmental services for youth with disabilities

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Abstract
Co-production was vital to support public services provision during the first wave of COVID-19 pandemic, and one of the main challenges for service providers is to make co-production sustainable. There are few empirical studies on the sustainability of co-production from a long-term perspective. This study aims to contribute to this topic by exploring the micro-level foundations of co-production persistence through a longitudinal qualitative study in three public service organizations providing developmental services for youth with disabilities. Co-production is analyzed along the service provision process before, during and after the first COVID-19 lockdown, with specific attention on exploring how the conditions for sustainable co-production – mutual commitment, complementarities and institutional arrangements – occur and reinforce one another after an external shock. The findings suggest that the persistence of co-production is a result of a process in which experimentation with new
complementarities can enhance previous co-production experiences and generate a context of mutual commitment that facilitates future co-production initiatives and their institutionalization.

Points for practitioners

This article suggests how service providers can activate a potential virtuous cycle of co-production by increasing the opportunities that foster and sustain users and families’ self-efficacy and reciprocal trust, and the contributions from wider social support networks of the most vulnerable people.

Keywords
microfoundations of co-production, public service management, conditions for sustainable co-production, the sustainability of co-production, developmental services, COVID-19

Introduction

Co-production is a central topic in recent research into public administration, and gained particular attention during the first wave of the COVID-19 pandemic when citizens, civil society, firms, and third-sector organizations strongly contributed to the implementation of both public health policies and the regular provision of health, educational and social services. This situation has been defined as a “gigantic co-production project” (Steen and Brandsen, 2020) and one challenge for the future is to preserve the value generated through these collaborative processes.

In the past, only a limited number of contributions adopted a long-term perspective (Brandsen, 2020; Nabatchi et al., 2017), but the flourishing of co-production initiatives in response to the emergency has offered opportunities to observe this phenomenon from its origin.

This study aims to contribute to this topic by exploring the micro-level foundations of co-production persistence. We explore the rise of complementarities and mutual commitment among co-producers before, during, and after the spring lockdown from February to June 2020, as well as the emergence of institutional arrangements aimed at steadying co-production practices in the future.

We analyze co-production as a wide range of activities that occur—in the form of co-commissioning, co-design, co-delivery, and co-assessment—in the public service cycle and involve regular producers and citizens who work together to produce benefits (Nabatchi et al., 2017).

We conducted a longitudinal qualitative study in three public service organizations within the Service for Autonomy in Lombardy, Italy, which is a program aimed at supporting youths with disabilities to achieve autonomy through intellectual and developmental services.
The paper is organized as follows: the theoretical framework is presented in the next section and is followed by a description of the empirical setting and methods in the third section. The fourth section provides evidence of the co-production process before, during and after the first COVID-19 lockdown. The last sections are devoted to a discussion of the relevant findings and the conclusions, highlighting theoretical and managerial implications.

**Theoretical framework**

Co-production can be assessed at the macro level, with specific attention to the broad system conditions affecting both its implementation and outcome; at the meso level, focusing on the organizational conditions of co-production; and at the micro level, considering individual behaviors toward co-production (Jo and Nabatchi, 2016). In this paper, we focus on the latter, recognizing the micro-foundations of co-production, and offer some insights into the institutional arrangements at upper levels.

Co-production can occur in the form of co-commissioning, co-design, co-delivery, and co-assessment (Nabatchi et al., 2017) along the human service provision in the phases of access, intervention planning, service delivery, and monitoring (Mariani and Cavenago, 2013). Co-commissioning refers to the involvement of service users in the strategic activities of planning, resource mobilization, and the prioritization of the desired outcomes, and co-design is related to the activities of service planning that place the experience and knowledge of the service user at the heart of the intervention plan. Co-delivery refers to the joint activities of users and providers aimed at delivering public services and improving service quality. More specifically, the co-delivery of social and educational services for children or vulnerable people involves the users as well as their families (Honingh et al., 2020), and parental contributions can be economic, political, social, and pedagogical (Pestoff, 2012). Finally, co-assessment refers to the involvement of users in monitoring and evaluating the quality of service and achievement of outcomes, and its results can be used to improve future service provision.

Co-production can be seen as both a long-term effect of the co-produced activities, and a means to design, deliver, and evaluate the public services being sustained over time (Jaspers and Steen, 2020). According to Steen and Brandsen (2020), three conditions can facilitate the post-pandemic survival of co-production initiatives: supportive institutional frameworks, the presence of complementarity, and a mutual commitment among co-producers (Figure 1).

Institutional frameworks include both supportive regulation at the policy level (Ostrom, 1996), and institutional arrangements aimed at institutionalizing practices of co-production at the organizational level (Steen and Brandsen, 2020). Shared objectives and procedures become persistent through institutionalization, as they are embedded into the set of rules guiding the behavior of actors in an organizational field (Scott, 2008). Institutional frameworks can support the development of successful co-production initiatives (Ostrom, 1996). In fact, having different rules for the coordination of interests and expectations can provide the basis for ongoing co-production by stabilizing the conditions for better interaction (Steen and Tuurnas, 2018). These rules define who is eligible to
co-produce, the extent and nature of co-production, and the distribution of costs and benefits (Alford, 2014), and should be flexible enough to meet different needs (Jaspers and Steen, 2020).

In the case of services for vulnerable people, an institutional framework is flexible when it provides freedom for the design and delivery of tailored programs, uses a simplifying language, and allows meetings to be scheduled in a familiar setting, so as to sustain the co-production of users and their families (Brandsen, 2020; Jakobsen and Andersen, 2013).

The occurrence of complementarities depends on the users’ intervention that can be more or less important for the final quality of the supply process. In the context of public services, user input is often limited to tasks that do not require specific professional skills, and its contribution lies in supporting complementary activities (Pestoff, 2012) in which users can synergistically provide their own personal resources (Ostrom, 1996). The public value chain can be very complex, especially in the case of services for the autonomy of people with disabilities, where different actors (i.e., psychologists, physicians, social workers, social educators) contribute to developing intervention plans and solutions (Mariani and Cavenago, 2013). The users benefit directly from service provision, and families, caregivers and friends can make complementary contributions which have indirect benefits (Bovaird and Loeffler, 2012). The existence of complementarities can positively affect the persistence of co-production over time (Jaspers and Steen, 2020), especially when each co-producer can provide personal resources (e.g., skills, time, or perspectives) that others don’t have (Ostrom, 1996). The rise of complementarities might require more time and effort at the initial stage, but the opportunity for synergy among co-producers can ensure higher returns in the long term (Ostrom, 1996). The mechanism through which the presence of complementarities facilitates co-production over time is the division of labour, in which the clear identification of roles, responsibilities, and contributions mitigates potential conflicts between co-producers (Pestoff, 2014).

Figure 1. Conditions for sustainable co-production.
Finally, as regards mutual commitment, co-producers increase their input in the long term if they believe that others will continue to contribute at the same or at a higher level, activating a virtuous circle (Ostrom, 1996). A user’s perception of self-efficacy and reciprocal trust is fundamental to improving mutual commitment (Fledderus et al., 2014). Self-efficacy refers to an individual’s belief in their own capacities, as well as the belief that the performed behavior can actually produce the expected outcomes (Maddux and Kleiman, 2016). It is a precondition for the initial involvement of nonprofessional co-producers in the process, and can increase when individuals have already had the opportunity to employ their abilities with positive results (previous experience) (Kellens et al., 2013), or when they have specific competencies that allow them to perform specific tasks (Bettencourt et al., 2002; Le Deist and Winterton, 2005). Self-efficacy makes users less vulnerable, and reduces the perceived risks in trusting the service provider (Fledderus et al., 2014). Trust can be defined as “the willingness of a party to be vulnerable to the action of another party based on the expectation that the other party will perform a particular action important to the trustor” (Mayer et al., 1995). Trust encompasses interpersonal behavior, benevolent expectations, and the willingness to be vulnerable (Rousseau et al., 1998), a sense of goodwill, and confidence in organizational competence and expected performance (Chen, 2010). It is one of the crucial conditions for collective action (Ostrom, 1998; Yamagishi and Cook, 1993), since it facilitates and maintains the work of collaboration but also reduces transaction costs (Bovaird, 2007; Bryson et al., 2006; Fledderus and Honingh, 2016) and a user’s risk aversion (Voorberg et al., 2015). Trust and self-efficacy mechanisms are embedded in mutual commitment (Ostrom, 1996; Steen and Brandsen, 2020). They can be considered both the antecedents and outcomes of co-production (Fledderus et al., 2014), as well as the main socio-psychological factors that can sustain the motivation of co-producers (Fledderus and Honingh, 2016).

Empirical setting and methods

In order to assess the conditions for sustainable co-production, we consider the case of the Service for Autonomy (SFA) program in Lombardy, Italy. The SFA is a social care service characterized by socio-educational activities that favor the autonomy of youths with mild to moderate intellectual and developmental disabilities. The SFA is regulated by the regional government, and is provided by 135 public or nonprofit organizations. The staff include social educators and coordinators with degrees in the psychological, pedagogical, or social sciences. They are supported by volunteers, social workers, and psychotherapists.

We chose to study this service for two reasons. First, it is a continuing service in which the relationships between users, families, and providers are critical for effective co-production (Robinson et al., 2020). Secondly, it is a service that was greatly challenged by COVID-19. Italy was one of the first countries to impose a lockdown in 2020, and to close schools and social care centers. This significantly affected the lives of people with disabilities and their families (Bentenuto et al., 2021). Families played
a pivotal role in providing 24/7 assistance in this context, and social care providers quickly innovated their services by adopting distance learning.

This work originates from an ongoing extensive research project that involves seven cases, and aims to analyze the contribution of the co-production process to the development of human capabilities. Upon the spread of COVID-19, we chose to observe the evolution of co-production in three (of the seven) service providers located in the city of Milan.

SFA-A is a social cooperative managing a farm. The program alternates educational modules with laboratories for creative skills and training experiences at the farm, or in other working environments. SFA-B is an association focusing its activities on attending local events, volunteering experiences with other organizations, and mobility in the city. Finally, SFA-C is a social cooperative promoting participation in cultural activities, gardening, and mobility, and engages its users in internal administrative duties.

We analyzed these cases through a longitudinal multiple-case study approach (Yin, 2009). Following previous qualitative studies on co-production (Farooqi, 2016; Kershaw et al., 2018; Tummers et al., 2012; Tuurnas, 2015), we considered the privileged viewpoint of providers that have an overall view of the service provision, and knowledge of the organizational operating conditions. Table 1 includes a description of the research process.

First, we performed a document analysis (regulations, reports, websites, blueprints, and newspapers in the field of welfare services for people with disabilities), followed by two-hour interviews with each key informant (September–November 2019), aimed at understanding the institutional and social context of SFAs. Following the suggestions that emerged from the interviews with the key informants, we chose to interview the service coordinator and social educators in each SFA, for the longitudinal analysis.

| Table 1. Research phases. |
|---------------------------|
| Timeline                  | Sources and interviewees |
| September 19 to November 2019 Preliminary phase | • Interviews with key informants (two public officials engaged in the commissioning of services; one manager of multiple disabilities services)  
• Documental analysis (regulations and institutional reports on disability) |
| November 2019 to February 2020 Before COVID-19 | • Three interviews with the service coordinators (90 min each)  
• Three interviews with social educators (60 min each) |
| February 2020 to June 2020 During the lockdown | • Three interviews with the service coordinators (90 min each) |
| September 2020 to April 2021 After the lockdown | • Three interviews with the service coordinators (90 min each)  
• Three interviews with social educators (60 min each)  
• Documental analysis (internal documents, social and financial reporting, newspapers, website and social media) |
We started the longitudinal multiple case studies analysis in November 2019. Data gathering was undertaken in three different periods: before the first wave of the pandemic (November 2019–February 2020); during the first wave (February–June 2020); and after the first wave of the pandemic, in the first stages of the vaccination campaign (September 2020–April 2021). In the interviews conducted before the first wave of the pandemic, we asked the providers to highlight the criticalities related to the co-production dynamics of the service provision. Interview transcripts were successively analyzed according to the theoretical framework by assessing the conditions of sustainable co-production. In the interviews conducted during and after the first wave of the pandemic, we explored the service providers’ perspectives on the impact of COVID-19 on SFA co-production with users and families, focusing on the conditions for the persistence of co-production. All interviews were recorded and transcribed verbatim.

The data was coded separately by the researchers. Multiple sources were considered in order to perform data triangulation and increase the credibility of the results (McMurray, 2004). The results of the interviews were integrated with additional information collected from the assessment of internal documents, social and financial reporting, newspapers, and official communications from the website. The results were also compared and discussed with a third researcher who had in-depth knowledge of SFA provision, and built into a coherent narrative.

Findings

The findings are organized into two subsections. In the first subsection, we focus on the interactions between SFA providers, users, and their families to highlight the conditions for sustainable co-production before the pandemic, with a specific focus on complementarities, mutual commitment, and institutional arrangements. In the second subsection, we analyze the changes in service provision during the first lockdown, and the effect of the pandemic on the conditions for sustainable co-production.

Long-term co-production conditions before the pandemic

Achieving autonomy for people with mental disabilities is a highly complex challenge that requires the involvement of different actors. In assessing the conditions for sustainable co-production, we focus, in particular, on the role of the users’ families before the pandemic.

Complementarity in the SFA. In the preliminary phases of access, secondary school teachers or social workers connect each user and family with the provider, and together with other specialist consultants, provide an initial evaluation. The users and their families offer the complementary information needed to outline an individual’s conditions, their needs and priorities (co-commissioning), and at the same time they provide the knowledge needed to identify the most appropriate service architecture in the intervention planning phase (co-design).
To achieve the objectives, SFA providers offer different educational and social activities to achieve users’ learning objectives. After initial classroom training, they propose voluntary services for the local community, work internships, and social housing pathways. In this phase, the families of users can co-deliver the service by identifying training opportunities, organizing fundraising campaigns, or participating in training activities that the SFA proposes for them. The most important complementary activities, however, are those related to the educational dimension. Families are called to support their child in achieving the learning objectives:

We ask parents to allow their children to implement what they learned with us at home. We provide our users with some tools and skills useful for everyday situations, then we ask families to let them experiment their new ability. (Educator of SFA-B)

Finally, in the monitoring phase, the SFA staff, together with the contact persons from firms or other voluntary organizations involved, evaluate the achievement of the objectives through meetings, observations, and reporting. In their role as co-assessors, the users are invited to participate in different self-assessment activities, and the families have an ancillary role in providing educators with feedback on the ongoing activities outside the protected area of the SFA setting.

Conditions for mutual commitment. The willingness and the ability of families to support SFA educators through complementary contributions vary greatly from family to family, and are influenced by the level of mutual commitment. The emergence of mutual commitment is facilitated by reciprocal trust that increases the awareness that all the co-producers are strongly engaged in fulfilling the educational goals. A fundamental role for nonprofessional co-producers is also played by the perception of self-efficacy that increases a family’s awareness of their importance in promoting their child’s autonomy.

Increasing the trust of some families in the educators, and improving their awareness about the importance of their role as co-producer can be very challenging, however. Some parents are not prone to listening to the opinions of professionals who are struggling to revise their initial expectations in the phases of co-commissioning and co-design; and while some families have particularly conservative beliefs that do not consider their child’s actual potentialities, others have unrealistic expectations,

There are people who may not have deeply understood their child’s disability and when we get bizarre answers, we have to go and work on idealization. (Coordinator of SFA-A)

In the phase of co-delivery, a lack of trust is demonstrated by unnecessary family interference, hampering the path of their children toward autonomy. The respondents defined this as the Penelope’s shroud effect, in which families tend to destroy what educators have built:
We teach them to take public transport, but families continue to take them to courses or internships by car, even though the children have all the tools to get by very well. In this way children risk losing the skills they have built with great effort. (Coordinator of SFA-B)

Conversely, coordinators complain about the low engagement of more fragile families who live in socially disadvantaged contexts. Limited user’s skills, challenging familiar situations, and circumstances of social exclusion hamper family engagement by reducing, from the very beginning, their chance to develop an actual perception of self-efficacy.

It is not always possible to do it [co-production] when there are problematic and complex families in which parents or other relatives suffer mental diseases or other disorders, or when they are older or have poor education that makes parents perceive disability in a fatalistic way. (Coordinator of SFA-B)

**Institutional arrangements for co-production.** While the level of mutual commitment influences the willingness and the ability of families to support educators through complementary contributions, the institutional arrangements provide the chance to exploit such complementarities.

In the SFA, such arrangements are inspired by consolidated studies in the field of education for people with mental disabilities, recognized by the Lombardy Region regulations, and implemented by each provider. In particular, while the regulations highlight the need to actively involve both the users and their families along the service provision process, providers define and formalize the procedures to allow co-production.

Families are involved in defining the educational plan (co-commissioning, co-design) in the formal procedures, and in regular meetings with the social educators to discuss the level of achievement for the planned objectives (co-assessment). The educational plan functions as a social contract, and parents should respect and contribute to its implementation.

Alongside the formalized meetings and routines, some informal procedures are implemented in both co-delivery and co-assessment. Families can ask the SFA staff for additional help to deal with difficult situations with their child, in co-delivery, or they may report educational or social opportunities by bringing their network of contacts into the SFA. Family feedback is collected in a spontaneous way for co-assessment, when the families pick their children up from the SFA facility, or through occasional phone calls.

**The effects of the first COVID-19 lockdown on SFA**

The extreme lockdown measures during the first phase of COVID-19 diffusion in northern Italy meant that the SFA organized the service completely in distance learning. The educators and coordinators explained that the effect of the first lockdown on SFA’s users was extremely negative. Not receiving the daily direct stimulation and being forced to remain indoors led to a significant increase in psychological problems, including some serious cases of eating disorders or marginalization, and a common decrease in autonomies. There were some additional experiences of co-production
within this general context, affecting both the emergence of new complementarities and the process of mutual commitment. Some supportive institutional arrangements emerged after the lockdown as a consequence.

**New complementarities.** The stronger involvement of families in delivery reduced the damage caused by interruption to the traditional service. Families played both a substitutive role, by replacing the educators in some educational activities, and a complementary role, by providing support to join the e-learning activities.

Educators asked parents to play a fundamental role in the additional educational activities to compensate for the absence of the daily activities.

Involving them to maintain a certain level of mental stimuli for our users was essential. For example, we asked them to participate in a dance competition by sharing a tape with a family performance. (Coordinator of SFA-A)

In some cases, parents proposed additional courses. This was the case in SFA-B, where a father proposed activities on ancient writing and cinema. In this vein, the lockdown helped some parents to experiment with how they could apply their specific abilities in educational activities for the development of the user’s autonomy.

The rise of new complementary activities was also related to the technological support required by the families: almost no SFA users had ever used e-learning platforms, and families had to intervene to ensure that their children connected regularly. Some acquired greater autonomy in the process.

**Increasing the conditions for mutual commitment.** Digital technologies enabled interaction between SFA personnel and families during the lockdown:

We didn’t want to leave them alone. The relationship became closer, and they remain our key alliance. (Coordinator of SFA-C).

Families appreciated the strong efforts of educators during the crisis, and the greater closeness between them contributed to improving trust relationships.

We have really entered their homes and their lives. After this experience, families trust us more and we know them better. This is a good basis for building something in the future. (Educator of SFA-C)

Educators and coordinators highlight how the trust that the families had in SFA personnel, as well as a feeling of the family’s self-efficacy, increased in some cases. Several families who had expressed skepticism toward SFA’s educational approach started being more collaborative.
Someone really started to listen to us, to accept our suggestions, to recognise our experience in the field of mental disabilities. They realised that the parent’s knowledge is not enough to implement a professional educational path. (Coordinator of SFA-B)

According to the interviewers, such change is related to the increase in the awareness of families regarding both the actual abilities of their children, and the commitment and engagement of the educators in their work. The COVID-19 lockdown forced families to help their children follow courses and carry out other activities through distance learning. Some families have consequently had the opportunity to acquire greater awareness of the actual abilities of their children; they know what they are able to do and what they are not, and therefore they can also understand the work and the efforts of the educators, which has a positive effect on the vital issue of expectations alignment. Families substituted for the educators in face-to-face interactions and direct observations of their child’s learning developmental process.

Families became the educators’ eyes, providing information on our users’ resilience to both the crisis and distance learning activities. (Coordinator of SFA-C)

This positive effect did not affect all families and users, however, but only those that supported or actively participated in co-producing the service during the lockdown. Such increasing awareness did not occur for the families and children in the most fragile psychological and social situations, who became more isolated. There was also no virtuous circle for users and families who refused the use of digital tools due to digital illiteracy or other socio-economic and psychological barriers. In these cases, the negative effects on the individual’s development path were evident to educators right from the start of the pandemic.

**Stabilization of emerging institutional arrangements.** After the first lockdown, the SFA providers were able to reorganize their activities with a physical presence, in compliance with anti-COVID measures. All the interviewees agreed that users were very tired of not being able to leave home, and of continually using technological tools to communicate. The common immediate reaction was thus to abandon all distance learning activities and allow users to spend time together in small groups to control the risk of contracting COVID-19. After the first wave of the pandemic, however, some of the co-production practices that arose during the lockdown were subsequently institutionalized.

The involvement of families in distance learning activities in the co-delivery phase allowed them to discover and enable their specific competences, and some of the initiatives provided by parents as supplementary activities during the lockdown, such as ad hoc laboratories, were introduced as part of the SFA offer for the following year. The existing informal interactions between families and educators intensified in the co-assessment phase:

We are more familiar with each other, consequently we talk more about how the children are, how they behave at home or during internships. In short, we receive more feedback today than before the pandemic. (Educator of SFA-A)
The Lombardy Region also intervened in the autumn of 2022 with a decree aimed at acknowledging some good practices that emerged during the lockdown. This supportive regulative framework does not describe specific activities, but rather opens providers to the possibility of organizing services in a more flexible and personalized way. The response of the SFAs who maintained educational activities in emergency conditions highlighted how giving flexibility to providers favors service innovation.

The emergency meant the SFA was not substitutive but was a support service for people and families. There is a need to rethink the old service provision approach. Today there is the opportunity to experiment with new modular service provision through the implementation of personalised pathways and projects in response to the diversification needs of people with disabilities and those of their families. (Regional Decree n. 5320/2022)

The decree, therefore, does not institutionalize specific co-production practices, but rather creates a congenial context within which to experiment with different forms of service.

Discussion

The conditions that can facilitate the post-pandemic survival of co-production initiatives involve supportive institutional frameworks, the presence of complementarity, and a mutual commitment among co-producers (Steen and Brandsen, 2020). Analyzing the service before the pandemic meant that we obtained insights into how these conditions are related to each other, and the analysis during and after the first lockdown meant that we gained a better understanding of how these conditions occur and reinforce one another after an external shock.

Figure 2 includes a representation of the relationships between the conditions for sustainable co-production which emerged from the analysis of the SFAs conducted before the pandemic. Co-production emerges when complementarities in the role of co-producers can be identified along the service cycle in the phases of defining the objectives (co-commissioning), intervention planning (co-design), service implementation (co-delivery), and monitoring (co-assessment). The presence of complementarities, however, is not sufficient itself; their exploitation depends on both a supportive institutional context, and an actual commitment of co-producers.

In the case of SFA, for example, formal and informal arrangements – allowed by the regulations, inspired by research in the field of education for people with mental disabilities, and implemented by each service provider – define the boundaries of possible co-production. At the same time, the exploitation of complementarities requires a mutual commitment that is strongly influenced by the willingness and the abilities of the nonprofessional co-producers. A family’s trust in the educators, awareness of the importance of their role as co-producers, and their ability to positively contribute to the educational process are preconditions for increased mutual commitment.

During and after the first lockdown we had the opportunity to observe the relationships between service complementarities, institutional arrangements, and mutual commitment
from a dynamic point of view (Figure 3). As Jaspers and Steen (2020) point out, the persistence of co-production can be interpreted in terms of both the ability of co-produced activities to generate long-term outcomes, and the duration of co-production initiatives over time. Our results suggest that it can also be interpreted as the result of a process

\[ \text{Institutional arrangements} \]

\[ \text{Chance to exploit} \]

\[ \text{Complementarities} \]

\[ \text{Service co-production} \]

\[ \text{Will/ability to exploit} \]

\[ \text{Mutual commitment} \]

\[ \text{Self-efficacy} \]

\[ \text{Trust} \]

\[ \text{Experience} \]

\[ \text{Competences} \]

**Figure 2.** Conditions for sustainable SFA co-production before COVID-19.

\[ \text{Service lockdown} \]

\[ \text{Institutional arrangements} \]

\[ \text{New complementarities} \]

\[ \text{Complementarities} \]

\[ \text{Re-designed service co-production} \]

\[ \text{Mutual commitment} \]

\[ \text{Self-efficacy} \]

\[ \text{Trust} \]

\[ \text{Experience} \]

\[ \text{Competences} \]

**Figure 3.** The impact of the COVID-19 lockdown. What’s left?
in which experimentation with new complementarities can enhance previous co-production experiences and generate a context of mutual commitment that facilitates future co-production initiatives and their institutionalization.

Previous studies have highlighted how a user’s trust in providers and their self-efficacy motivates individuals to co-produce (Fledderus and Honingh, 2016; Van Eijk and Steen, 2016). In our analysis, we observed that this motivation increased further because of the lockdown. Indeed, this condition made the families of several users keener to co-produce owing to the emergence of new complementarities not previously included in the institutional arrangements. The push from the pandemic resulted in several opportunities to experiment with new forms of co-production through complementary activities, particularly in the phases of co-delivery and co-assessment. The service closure and the implementation of distance learning courses forced users’ families to actively co-produce with educators so as to allow their children to participate in the proposed activities, in order to continue fulfilling the co-designed development plans. Additional courses managed by some parents during the lockdown were institutionalized and, as we write, complete the SFA offer, increasing the overall level of service diversification. At the same time, some practices of in-itinere co-assessment that emerged during the lockdown are still functioning. All these factors contributed to redesigned service co-production that has been partially institutionalized by both the policy makers and each provider. Regardless of whether or not these initiatives are pursued in the future, however, what remains, according to the providers, is a climate of increased mutual commitment.

As previous studies suggested (Bryson et al., 2006; Ostrom, 1998; Yamagishi and Cook, 1993), the positive experiences of co-production in the first lockdown and related to the rise of new complementarities have contributed to the generation of a relationship of reciprocal trust between provider and user or family, and this trust positively influenced the mutual commitment. The increase in users’ perceptions of self-efficacy resulting from the co-production experience trialled during the first lockdown can further contribute to increasing the mutual commitment that is the basis for the exploitation of new future co-production complementarities (Conner et al., 2016). In fact, when individuals believe that their actions affect their lives, they feel less risk in trusting providers since they perceive decreased dependence on the conduct of others, and they become more prone to co-produce (Fledderus et al., 2014; Mishra, 1996; Whitener et al., 1998).

The proposed representation of a virtuous co-production cycle did not affect all SFA users, however. In particular, those families recognized as fragile before the pandemic distanced themselves further, closing off any attempt to carry on the educational project. This suggests that the co-production initiatives implemented in order to maintain the SFA were only profitable when families were prone to collaborate before the pandemic broke out; in contrast, an initial lack of self-efficacy could be the reason why the virtuous cycle did not start (Fledderus, 2015). The main assumption of co-production is the inclination and ability of users to be involved in the service provision. This means that users have responsibility and power, and are conscious that their contribution can improve the quality of the service (Fotaki, 2011). Family empowerment has been widely recognized as of fundamental importance for care service effectiveness (Fotaki, 2011; Sicilia et al., 2016), and this concept has become a common value across
disciplines (Koren et al., 1992). The results of this contribution suggest that the effort to increase the empowerment of families should also aim to strengthen the skill of collaboration, and, ultimately, to co-produce throughout the service provision process.

**Conclusion**

In this study we analyzed co-production processes in developmental services for people with disabilities before, during and after the first lockdown for the COVID-19 pandemic, highlighting the conditions for a persistent micro-level co-production effort from a long-term perspective.

From a theoretical perspective, this work contributes to the literature on co-production in public services in three ways. Firstly, it contributes to the empirical research on co-production by focusing on different phases of the collaborative process (co-commissioning, co-design, co-delivery, co-assessment). Secondly, the results suggest a possible enrichment of the extant literature on co-production in social and educational services by highlighting the roles of co-producers other than providers and users, such as parents, families, and caregivers, which make the interactions more complex, with an increased risk of value co-destruction. Services for the non-self-employed elderly, educational services for children and other services in the field of disability can fall into these categories. Finally, this work contributes to the recent literature on co-production initiatives in the COVID-19 pandemic, seeking to identify the conditions of sustainable co-production at the micro-level. In this vein, we suggest that the persistence of co-production involves not only the capacity to co-produce activities to generate long-term outcomes, or the duration of co-production initiatives over time (Jaspers and Steen, 2020), but rather the result of a process in which previous co-production initiatives generate a favorable context for future co-production initiatives.

From a practitioner’s viewpoint, this case offers some insights into how service providers can activate a potential virtuous cycle of co-production by increasing opportunities that foster the self-efficacy of users and families, as well as reciprocal trust. Moreover, it suggests that the process of empowerment of the most fragile families involves both personalized initiatives aiming to increase the ability to co-produce, and collaboration with the support network of actors who, starting from compulsory school, follow the user's developmental path.

This research has implications from a policy-making perspective. The experience of SFA during the pandemic highlighted that when providers need to identify alternative ways to meet users’ needs, they are able to develop innovative services, also leveraging the resources of other actors through co-produced solutions. In this vein, policy-makers are called on to set institutional contexts that are flexible enough to receive innovative solutions from the actors involved in the co-production of public services. The findings of these studies also highlight the importance of the actual promotion of a mutual commitment, particularly in services for vulnerable people. This requires the implementation of public policies aimed at promoting the development of co-production capabilities considering social inclusion, not just as a potential outcome of co-production, but also as an important driver for the actual participation of the most fragile families.
The way that SFAs addressed the lockdown pandemic shows how the conditions for sustainable co-production affected each other. Nevertheless, further research is required to face the limitations of this explorative contribution, which are mainly linked to its case study-based nature, which restricts the external validity of the results – as well as the observation of longitudinal data for a limited number of months after the lockdown. Further research could test the validity of our findings by extending the analysis to other typologies of human services, as well at determining whether, two years later, the co-productive approach in SFA has been preserved.

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